



Hampshire County Council

ANNUAL HEALTH REPORT

OF THE

COUNTY MEDICAL OFFICER

H. LESLIE CRONK, M.A., M.D., D.P.H.

FOR THE YEAR

1947

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FOREWORD.

In 1947, the birth rate was the highest yet recorded in this County and institutional confinement of mothers was increased, 955 normal and 726 complicated against 858 normal and 688 complicated in the previous year. The progress of provision of maternity beds by the County Council has been described and the County Council may feel some pride in handing over to the Regional Hospital Board such satisfactory accommodation.

There is some satisfaction that the maternal mortality rate is the lowest yet recorded, but there is still plenty of scope for improvement; it is theoretically possible to eliminate the majority of deaths from toxæmia and obstetric shock by better ante-natal care and attention at confinement. The saving of infant life has two sides, the prevention of still births and the lessening of deaths during the period of infancy. It is noted that the proportion of still births to live births has practically remained stationary for the past four years and that the Infant Mortality Rate has increased slightly from its phenomenally low figure of 29.3 in 1946 to 34.2, largely due apparently to increase in deaths from causes grouped together by the Registrar General as congenital malformations etc., from the figure of 10.6 to 13.1. Of the deaths under one month a larger proportion (55.3 per cent) died in under 24 hours than in 1946 (41.4 per cent). The correct feeding of the mother has no doubt a good deal of influence on the vitality of the newborn child and strenuous efforts continue to be made to see that the Government Vitamins are actually consumed by expectant mothers, but in some areas, the uptake remains very poor. Next to food in importance comes housing and this cannot yet be considered satisfactory though many houses have been built and numbers converted or repaired and camp hutments put into use.

The adequate supply of pure water is of great importance and I am indebted to Mr. McDonald, Engineer of the Hampshire Rivers Catchment Board for a summary of proposed extensions made as a result of a detailed survey of the needs of the County.

Good food and housing may do much to promote health, prevent infection and minimise its results, particularly as regards tuberculosis, but some infections are at present uncontrollable, among them anterior poliomyelitis. An account on the epidemic as it affected this County is included to place on record for future use.

The Sanatoria and Laboratory Services are now the responsibility of the Regional Hospital Board and for this reason, I include some notes made by Dr. Hart, Chief Clinical Tuberculosis Officer and Pathologist, on their growth.

One of the most important events in 1947 was the tour of the Mass Radiography Unit about which Dr. Lendrum, the Physician in Charge has contributed some details. It is hoped that it will be possible to have these surveys regularly and that all parts of the County may be reached when the Regional Hospital Board have similar mobile units.

Staff.

The position as at December 31st, 1947, was as follows :—

Assistant County Medical Officers.

Esther Ashworth	† Hilda M. P. Hunt
* M. Avent	* D. J. N. McNab
Catherine Avery	* R. Mackay
† Kate D. Ball	* G. Nisbet
† Sarah Boyle	* S. C. Parry
† Laurel Campbell	W. Simpson
* A. A. Cockayne	* G. Tate
† A. E. Druitt	* W. C. D. Walmsley
* J. L. Farmer	Phyllis Watson
† Audrey M. Hughes	

†—Part-time.

‡—Is Senior Assistant for Maternity and Child Welfare Services.

*—Medical Officers of Local Sanitary Authorities also.

Tuberculosis Officers.

W. J. Hart, Deputy County Medical Officer and Senior Clinical Tuberculosis Officer	
Joan Butterworth	H. S. Fraser
A. Capes	B. L. Lloyd

Child Guidance Team.

Dr. A. F. Mary Christie	Psychiatrist.
* Dr. W. Furstenheim	Assistant Psychiatrist.
Mr. H. R. Melrose	} Educational Psychologists.
Miss M. Baldwin	
Miss Brewis (appointed July 1947)	} Psychiatric Social Workers.
Miss J. Eastman	
Mrs. Morison (appointed September 1947)	

*—Part-time.

County Oculist.

Dr. Christina S. Stoddart

County Orthoptist.

Miss M. E. Sharland (commenced duty 27.10.47).

Speech Therapy.

Chief Speech Therapist.

Mr. A. P. Tolfree (part-time)

Assistant Speech Therapists.

* Miss P. G. Conway
Miss M. D. Davie

*—relinquished duty with Isle of Wight Local Education Authority as from 3.9.47.

Senior Dental Officer :

Mr. C. C. Chadwick

Assistant Dental Officers :

Miss E. O. Betts	Mr. E. T. Mason
Mr. T. E. Black	Mr. T. McClelland
Mrs. B. Durbin	Mr. D. H. Oliver
Mr. F. H. Edey	Mr. W. H. Price
Mr. K. G. Farey	Miss J. Roberts
Mr. R. T. Hale	Mr. J. E. Roberts
Mr. L. J. Haworth	Mr. E. J. Taylor
Mr. R. L. James	Mr. R. C. Virgo
Mr. A. J. W. Johnson	*Mr. B. T. Wyatt (part-time)

*—Gives 1/11th of his time to Winchester City as M. & C. W. Authority.

Superintendent Health Visitor and School Nurse

Miss E. Stevenson

Chief Administrative Assistant.

Mr. C. G. Cartwright

VITAL STATISTICS.

Extracts from Vital Statistics.

	Male	Female	Total	Rate per 1000 pop.	England & Wales
Live Births : Legitimate ...	5800	5375	11175	20.2	
Illegitimate ...	386	375	761	1.4	20.5
Stillbirths : Legitimate ...	145	119	264	0.48	
Illegitimate ...	18	11	29	0.05	0.50
Deaths	3291	3226	6517	11.8	10.0

Deaths from	Number	Rate per 1000 Total Births	Provisional rate for England & Wales
Puerperal and post-abortive sepsis ...	5	0.41	0.32
Other puerperal causes	11	0.92	0.85

Death Rate of Infants under one year of age.

	Number	Rate per 1000 Live Births	
		Administrative County	England & Wales
All Infants	409	34.2	41
Legitimate	360	30.1	
Illegitimate	49	64.4	

These Tables show a higher Birth Rate (21.6) than has been recorded in this County for 25 years at least (in 1923 it was 19.2), the rates for the last years being--

1946—20.7 ; 1945—19.1 ; 1944—20.5 ;
1943—18.3 ; 1942—18.2 ; 1941—16.8 .

The number of illegitimate births is down and this is a satisfactory feature for the infant's sake, not only in regard to its survival but also its future mental and physical welfare.

Two other rates are also an increase on those for 1946—that for infant mortality increasing from its very low record of 29.3 to 34.2, an increase disappointing but expected—no useful comment can be made as to the slight increase (11.4 to 11.8) in the crude death rate.

The maternal mortality rate has decreased from 2.09 to 1.31 which is the lowest yet recorded in this County but not so low as the provisional figure for England and Wales (1.17). The rates for this County for the last few years have been—

1946—2.09 ; 1945—1.40 ; 1944—1.84 ;
1943—2.45 ; 1942—2.30 ; 1941—3.26 .

The natural increase of live births (11,936) over deaths (6,517) is 5,419, compared with 5,023, 3,654 and 4,366 in the three previous years.

The total population of the County is estimated by the Registrar General to be 553,930 (Urban Districts 316,530) (Rural Districts 237,400)

HEALTH EDUCATION.

Again this year health education has been continued, in the main through the doctors, dentists and health visitors as part of their general duties. No special schemes could be launched since planning the proposals under the National Health Service Act, 1946, which came into operation on the 5th July, 1948 has meant that there has been little time for any other developments.

Nevertheless, I am pleased to report that individual members of the staff have given talks to Business and Professional Women's Associations, British Red Cross Society, Teachers' Training Courses, Parents' Clubs, Townswomen's Guilds, Women's Institutes, Women's Voluntary Services and Training Courses for Citizen's Advice Bureaux Officers and every opportunity is taken to bring into these talks the value of health education. Assistant County Medical Officers who are also Medical Officers of Health undertake work in this direction and a very important feature is the oral hygiene that is taught by the County Dental Surgeons in the course of their clinical work or in talks given at school inspections.

Requests are often received for talks to be given on the National Health Service and various aspects of the Health Services and although this means work out of office hours to prepare notes, etc., no-one has done more in this direction than my Chief Administrative Assistant, Mr. Cartwright.

In September, the Eastleigh Borough Council arranged a most successful Civic Week and with the help of the Central Council for Health Education advantage was taken of this to arrange a special health education section.

At Havant, a Home and Family Week was arranged by the Church Army and here I must pay tribute to the splendid work of Mr. Penn, the Area representative of the Central Council for Health Education, who put in considerable work in arranging a health services exhibition, lectures and brains trust.

During 1947, Dr. Wilfred Wagland, Lecturer in Health Education, appointed jointly by the Education Committee and the Winchester Diocesan Council for Moral Welfare, carried out a most intensive series of talks to Teachers, Youth Club Leaders, Boys Clubs, Parent Associations, Clergy, etc. and he had considerable contact with the medical officers and other members of the staff. It is hoped later, with Dr. Wagland's help, to develop this work on the Health Education side and when this and other schemes now in preparation are developed under the National Health Service Act it will be found that much can be done to help in achieving the aim of Section 1 of the National Health Service Act, 1946, "to promote the establishment in England and Wales of a comprehensive health service designed to secure improvement in the physical and mental health of the people of England and Wales."

As in previous years full advantage has been taken of the specially designed leaflets issued by the Central Council for Health Education and these have been made available at Health Centres. The issue of the monthly magazine "Better Health" to Assistant County Medical Officers, Teachers and Health Visitors has been continued.

SANITARY CIRCUMSTANCES.

District Councils are much concerned with the standards of housing in their areas and the shortage of accommodation. There has also been much work done on the important matter of adequate and pure supply of water.

I am indebted to Mr. A. T. Macdonald, Engineer to the Hampshire Rivers Catchment Board for the following summary of extensions contemplated in the County, under the Rural Water Supplies and Sewerage Act, 1944 :—

1. *Alton Rural District.*

The Alton Rural District is almost entirely covered for water supplies by the Wey Valley Water Company and schemes have recently been approved for supplying the Rural District by extension of that Company's mains.

Principally, the areas to be supplied are Four Marks, Ropley East Tisted, Newton Valence and Binstead.

Extensions have also been approved for supplies by the Mid-Wessex Water Company along Odiham Road at Golden Pot and in Medstead and Wield.

An area requiring water in this rural district is at East and West Worldham but supplies here must await development of the Wey Valley Water Company's source at Oakhanger.

2. *Andover Borough.*

The Andover Borough propose to develop their existing source to increase the available supplies and to lay mains to Enham-Alamein and Little London in the north and Andover Down and Picket Piece in the east.

3. *Andover Rural District.*

A scheme has been submitted by the Andover Rural District Council for the development of their source at Ludgershall and for mains to be laid throughout the rural district to supply Kimpton, Fyfield, Thruxton, Monxton, Grately, Weyhill, Penton Mewsey and Hatherden.

The County Council are doubtful about the source at Ludgershall and on the advice of their Consultant it seems likely that a new source lower down the valley somewhere near Fyfield will be adopted.

The villages of Abbots Ann, Anna Valley, Upper Clatford and Goodworth Clatford are to be supplied from the Andover Borough's source at Smannel Road by bulk supplies through a meter at the Borough boundary.

4. *Basingstoke Rural District.*

An extensive scheme has been approved by the County Council for supplying Basingstoke Rural District by extensions from the mains of the Mid-Wessex Water Company and this Company have applied for an Order to extend their statutory area to cover the whole of the rural district and also to take in the area of the Herriard and Lasham Water Company. The County Council have also suggested that the Company take over the private supplies of the Portsmouth Estates and Dummer and the Manydown Water Undertakings.

When this scheme is complete all reasonable sized groups of houses in the Rural District will be supplied with water.

5. *Droxford Rural District.*

From the new borehole at West Meon the Droxford Rural District Council propose to supply all of the unsupplied part of their area by a main down the Meon Valley and this will bring water to Warnford, Exton, Corhampton, Droxford, Soberton and Soberton Heath.

The villages of Lower Upham and Upham are to be supplied by extensions of the Gosport Water Company's main.

Proposals have been approved for supplying Durley by extensions of the Southampton Corporation's main at Horton Heath.

6. *Hartley Wintney Rural District.*

Except for a small area at Hartley Wintney where the District Council are the water authority the Rural District is within the area for water supplies of the Mid-Wessex Water Company and recently proposals have been approved by the County

Council for several small extensions to bring water to those areas which have hitherto been unsupplied.

Principally, those areas are Heckfield, Bramsbill, Elvetham, Hartford Bridge and Winchfield.

7. *Kingsclere and Whitchurch Rural District.*

The scheme for supplying this area has been somewhat delayed owing to difficulties of establishing a suitable source but the most recent development is as follows :—

(a) The existing source at Kingsclere to be developed as far as possible and Mains to be laid in the north-eastern part of the district to cover Ashford Hill, Haughurst Hill and Baughurst and westward to supply Burghclere.

(b) Bulk supplies of water to be obtained from the Newbury Corporation and mains laid to supply Highclere and East Woodhay.

(c) A supply will be obtained from Whitchurch and mains laid to supply St. Marybourne and Stoke.

The ultimate intention is to have a single source in this district at Woolding Farm which is north-east of Whitchurch and to supply the whole of the district from here.

8. *New Forest Rural District.*

The area of this district is covered by the West Hampshire Water Company and the Southampton Corporation Water Undertaking but a substantial portion covering the parishes of Bramshaw, Minstead and Beaulieu is not included in either of these, the Rural District Council themselves being the water authority.

It is proposed to extend the mains of the West Hampshire Water Company eastwards to afford supplies in Beaulieu taking over the existing mains of the Beaulieu Estate and the County Council have recommended that the West Hampshire Water Company should apply for an extension of their statutory boundary to cover the whole of this parish up to the boundary of the Southampton Corporation Water Undertaking.

For Bramshaw and Minstead it is proposed to take a bulk supply of water from the Southampton Corporation at Cadnam and to take over the mains which were laid during the War by the Air Ministry to supply Stoney Cross and from this source to lay mains to Minstead and Bramshaw and as far north as Nomansland. In connection with this supply the County Council have suggested that while this is a satisfactory method of supplying this area to obtain an early supply it would be better for this area to be supplied by gravity from a proposed reservoir at Redlynch which is to be constructed by the West Hampshire Water Company and that thereafter the Company extend their statutory area to cover these parishes.

9. *Petersfield Rural District.*

The Petersfield Rural District Council are the water authority for the greater part of their district and water supplies here have been difficult and not free from contamination.

Consideration has been given to methods of improving the supply as follows :—

(a) By further development and purification of the several existing sources.

(b) By the development of a new source near Liss by sinking deep boreholes in the Hythe Beds.

(c) By handing over their area and so much of their present works as are required to the Wey Valley Water Company who would supply the whole district from their existing main at Greatham. It is understood that alternative (c) is likely to be adopted.

Mains will then be laid and supplies afforded to Colmore and Priors]Dean, Ashford Chase, Steep, Buriton and East Meon.

10. *Romsey and Stockbridge Rural District.*

A part of Romsey and Stockbridge Rural District is covered by the Southampton Corporation Water Undertaking and recently a scheme has been approved to extend their mains to bring water to unsupplied areas at Awbridge, Braishfield, Ampfield, North Baddesley, Chilworth and Nursling.

For the remainder of the rural district the District Council are the water authority and they are proposing to establish a source in the valley of the River Wallop north of Broughton and from this source to supply East Titherley, Lockerley, East Dean, Sherfield English, Stockbridge, Kings Somborne, Ashley and the villages in the Wallop Valley.

For West Wellow and Plaitford it is proposed to obtain a supply from the West Hampshire Water Company from their proposed reservoir at Redlynch.

The County Council have suggested that the private supply at Leckford belonging to the Leckford Estates should be taken over and that the scheme should be linked up with that of the Winchester proposals through Chilbolton.

11. *Winchester Rural District.*

Proposals have been submitted to the County Council and approved for supplying the northern part of the districts from a new source to be developed at Totford, Northington. From this source mains will be laid to East Stratton, Micheldever and Sutton Scotney and extensions from this point into the Andover Rural District to supply Bullington, Barton Stacey, Longparish, Chilbolton and Wherwell. Mains will also be laid from the Northington source to supply Swarraton, Bighton, Old Alresford and Bishops Sutton.

Itchen Stoke will be supplied by extension of the Winchester City's main at Itchen Abbas.

The southern part of the rural district will be supplied from a new borehole to be put down at West Meon by the Droxford Rural District Council and from this borehole mains will be laid to Bramdean, Cheriton, Kilmeston, Beauworth and Tichborne.

The small area at Morestead and Owslebury is being supplied from the Southampton Corporation's source at Twyford by a bulk supply.

CHILD WELFARE.

A.—General.

1. FEEDING.

(a) *Breast Feeding.*

No special investigation into the matter of breast feeding was carried out in respect of the year 1947, but the importance of the matter was stressed in various instructions issued to Health Visitors, and a special survey will be made in respect of the incidence of breast feeding during the period 1st April to 30th September, 1948.

Copies of an article written by Dr. H. Waller, Paediatrician at the British Hospital for Mothers and Babies, Woolwich, were sent to all Midwives, Health Visitors, the Matrons of County Council Maternity Homes, and to Assistant County Medical Officers, early in 1948, and the staff mentioned above were also supplied with a most useful leaflet on breast feeding issued by the National Association of Maternity and Child Welfare Centres.

(b) *National Milk and Vitamins Scheme.*

Lists showing the potential uptake in each of the Food Office areas for Hampshire continued to be received once every three months from the Regional Office of the Ministry of Food, and the arrangements mentioned in my report for 1946 held good during 1947.

2. HYGIENE.

(a) *Mothercraft Teaching.*

The total number of Mothercraft Lecture-demonstrations given in schools during 1947 was 98 and the number of schools dealt with 56.

It is hoped that the whole teaching of 'Parentcraft,' a wider subject, will be reviewed this year (1948) to enable other aspects, not included in the Mothercraft Lecture—demonstrations, to be incorporated in the teaching of Hygiene.

(b) *Home Visiting.*

In 1947 notifications were received of 8826 live births as against 8363 in 1946 in the area for which the County Council is the Welfare Authority. First visits were paid by Health Visitors to 11,650 children under the age of twelve months, the reason for the excess of visits over births being explained in previous reports.

To older children, from 1—5 years of age, a total of 61,924 visits were paid in 1947. In all, the number of visits paid to children up to the age of five years was 109,008 as against 99,141 in 1946, an increase of 9,867 in the year.

(c) *Child Welfare Centres.*

During the year new Centres were opened at Ashley, Bransgore, Exbury, Houghton, Kingsley, Stoneycross and Worthydown. Fritham Centre was closed. The number open on the 31st December, 1947 was 125. Tables setting out the work done are given later. During the year 6,559 children under twelve months of age and 1,720 over twelve months attended for the first time, and the total children who attended the Centres during the year who were at the end of the year under twelve months was 5,522, and over twelve months 10,268.

CENTRE	WHERE HELD	WHEN HELD All meetings commence at 2.30 p.m. unless otherwise stated	Medical Officer	Number of New Cases		Total Attendances			All Children	Total Number of Sessions	Average Attendance per Session	
				Children	Mothers	Children	Mothers	Children			Children	Mothers
				Under one year	One to five years	Under one year	One to five years	Under one year	One to five years			
Alresford	Dr. Hughes	59	20	620	514	190	704	22	32	28
Alton	Dr. Watson	134	89	1649	1047	696	1743	40	44	41
Ampert	Dr. Simpson	11	1	154	89	125	214	11	20	14
Andover	Dr. Simpson	276	36	4194	3273	1365	4638	82	56	51
Appleshaw	Dr. Simpson	17	3	234	99	176	275	12	23	19
(1) Ashley	Dr. Ball	16	27	49	24	80	54	2	27	24
Basing	Dr. Hunt	14	4	268	114	240	354	12	30	22
Basingstoke	Dr. Hunt	285	51	4404	3402	1225	4627	151	31	28
Bentley	*Dr. S. S. Strahan	11	7	126	58	81	139	10	14	13
Binsted	*Dr. S. S. Strahan	8	8	116	51	122	173	11	15	10
Bishopstoke	Dr. Glen	35	10	446	339	151	490	22	22	20
Bishops Waltham	*Dr. W. D. Mitchell	25	4	376	278	156	434	23	19	16
Boldre	Dr. Druitt	16	8	342	122	319	441	11	40	28

(1) Centre opened 5th November, 1947.

Botley	...	...	The Catherine Wheel	First Wednesday	*Dr. H. Bamber	19	11	213	104	126	230	12	20	18
Bramshaw	...	...	Village Hall	Fourth Wednesday	Dr. Campbell	8	8	79	82	48	80	10	8	8
(2) Bransgore	...	...	Harrow Hill Hut	First and Third Wednesday	*Dr. Howard	51	35	327	237	157	394	12	33	27
Breamore	...	...	Woodgreen Hall	First Thursday	Dr. McNab	7	1	126	44	97	141	11	18	11
Brockenhurst	...	...	Morant Hall	First and Third Tuesday	Dr. Ball	31	10	621	336	457	793	24	33	26
Broughton	...	...	Village Hall	Second Wednesday	Dr. Tate	20	8	237	87	202	289	11	26	21
Bursledon	...	...	Parish Hall	Third Tuesday	Dr. Avery	51	6	441	254	257	511	11	46	40
Chandlers Ford	...	...	Ritchie Hall	Second and Fourth Friday (2 p.m.)	Dr. Tate	69	9	896	622	340	962	21	46	42
Cheriton	...	...	Parish Hall	First and Third Friday	Dr. Avery	30	10	210	107	164	271	15	18	14
Christchurch	...	...	C.C. Heath Centre, Millham's Street	Every Tuesday	Dr. McNab	228	34	3795	2920	1309	4229	48	86	76
Colden Common	...	...	Parish Hall	Fourth Friday (2 p.m.)	Dr. Avery	27	5	241	127	164	291	10	29	24
Copythorne	...	...	Foresters Hall, Bartley	First and Third Thursday	Dr. Campbell	46	9	610	277	386	663	22	30	28
Cove	...	...	Labour Hall	Every Wednesday	Dr. Wahnsley	86	12	2189	1869	537	2306	51	45	42
Crawley	...	...	Village Hall	Second Friday	Dr. Avery	11	10	246	99	201	300	12	25	20
Crondall	...	...	Church Room	Second Monday (2 p.m.)	Dr. Boyle	14	10	122	57	85	142	11	13	11
Denmead	...	...	Free Church Schoolroom	Second and Fourth Monday (2 p.m.)	Dr. Watson	18	3	310	213	153	366	22	16	14

(2) Centre opened 4th June, 1947.

CENTRE	WHERE HELD	WHEN HELD All meetings commence at 2.30 p.m. unless otherwise stated	Medical Officer	Number of New Cases		Total Attendances			All Children	Total Number of Sessions	Average Attendance per Session	
				Children		Total	Children				Children	Mothers
				Under one year	One to five years	Mothers	Under one year	One to five years				
Dibden Purlieu ...	Women's Institute Hall	Second and Fourth Tuesday	Dr. Campbell	48	10	844	479	496	975	22	44	38
Droxford ...	Village Hall	First Monday	Dr. Parry	11	3	150	83	92	175	11	16	13
East Boldre ...	Parish Hall	First Thursday (2 p.m.)	Dr. Druitt	21	2	223	119	124	243	11	20	20
Eastleigh ...	C.C. Health Centre, Chamberlayne Road	Every Wednesday (9.30 and 2 p.m.)	Dr. Avery	276	37	4596	3824	1232	5052	92	55	50
Emsworth ...	Church Hall	Second and Fourth Friday	*Dr. E. B. McDowall	15	7	890	627	354	981	22	45	40
Eversley ...	Village Hall	First Tuesday	*Dr. E. Billing	13	3	186	91	124	215	12	18	14
(3) Exbury ...	Women's Institute	Second Thursday	Dr. Druitt	16	24	99	36	90	126	6	21	16
Fair Oak ...	Women's Hall	Second and Fourth Thursday	Dr. Avery	31	2	482	374	267	641	21	29	24
Fareham ...	Methodist Church Hall, Kings Road	Every Friday	Dr. Mackay	224	51	5015	3382	2166	5548	46	120	199
Farleigh Wallop ...	Club Room	First Thursday	Dr. Hunt	6	3	139	54	101	155	11	14	12
Farnborough ...	St. Mark's Club Rooms	Every Tuesday	Dr. Walmsley	150	14	2765	2272	524	2796	50	56	55
Fawley ...	Methodist Hall, Wesleyan Lane	First and Third Monday (2 p.m.)	Dr. Druitt	78	12	862	549	464	1013	22	46	40
Fleet ...	Church Institute	First and Third Thursday	Dr. Avent	76	11	805	642	237	879	24	37	33

(3) Centre opened 12th June, 1947.

Fordingbridge	...	Welfare Rooms	Every Friday	Dr. McNab	42	22	633	321	387	708	45	16	14
(4) Fritham	...	Sunday School Room	Second Wednesday	*Dr. H. Pesel	6	—	53	31	30	61	9	6	6
Gosport (Elson)	...	St. Thomas's Church Hall	Every Tuesday	Dr. Ashworth	192	55	3991	3216	1681	4897	47	104	85
Gosport (Forton)	...	Crossways Social Hall	Every Friday all day	Dr. Ashworth	284	65	5124	4575	1575	6150	46	133	111
Gosport (Stoke Rd.)	...	Methodist Sunday School Room	Every Wednesday (10 a.m. & 2 p.m.)	Dr. Ashworth	385	86	5994	4794	1699	6493	96	68	62
Grayshott	...	Village Hall	Every Friday (2.45 p.m.)	Dr. Watson	50	5	632	555	85	640	48	14	13
Hamble	...	Memorial Hall	Second and Fourth Wednesday	Dr. Farmer	33	7	796	357	506	863	21	41	36
Hambleton	...	Women's Institute	Third Friday	*Dr. E. J. Horn	4	1	195	30	181	211	11	20	18
Hartley Wintney	...	Edward Memorial Hut	First and Third Friday	Dr. Avent	52	12	630	435	300	735	22	33	28
Havant	...	C.C. Health Centre	Second and Fourth Tuesday 9.30 a.m. and 2 p.m., except when there is an Orthopaedic Clinic in morning	Dr. Nisbet	98	20	1526	928	818	1746	39	45	40
Hayling (North)	...	Recreation Hall	First and Third Tuesday 9.30 a.m. only	Dr. Nisbet	14	4	364	207	277	484	22	22	17
Hayling (South)	...	St. Mary's Institute	First and Third Wednesday at 9.30 & 2 p.m.	Dr. Nisbet	71	52	1247	789	730	1519	44	34	28
Headley	...	"Hillands," Headley	Second and Fourth Friday	Dr. Watson	39	14	524	347	256	603	21	28	25
Hedge End	...	St. John's Room	Second and Fourth Tuesday	*Dr. H. E. Bamber	47	12	704	365	427	792	26	36	31

(4) Centre Closed October 1947.

CENTRE	WHERE HELD	WHEN HELD All meetings commence at 2.30 p.m. unless otherwise stated	Medical Officer	Number of New Cases		Total Attendances			All Children	Total Number of Sessions	Average Attendance per Session	
				Under one year	One to five years	Mothers	Children	Children			Children	Mothers
								Under one year	One to five years			
Hordle	Women's Institute Hall	Third Wednesday (2 p.m.)	Dr. Ball	46	12	310	214	151	365	10	36	31
Hook	Village Hall	Fourth Tuesday	Dr. Hunt	6	—	103	64	86	150	11	14	9
Horndean	Nash Memorial Hall	Second and Fourth Tuesday	Dr. Watson	51	11	561	446	227	673	22	30	25
⁽⁵⁾ Houghton	Reading Room	Second Monday	*Dr. Hobbs	5	14	70	29	53	82	7	12	10
Hurstbourne Priors	Village Hall	Second Tuesday	Dr. Simpson	1	2	82	19	98	117	11	10	7
Itchen Abbas	Village Hall	Second Thursday	Dr. Hughes	17	4	204	113	125	238	11	22	19
Kingsclere	Village Club	Fourth Thursday	Dr. Hunt	34	10	358	172	242	414	11	37	32
⁽⁶⁾ Kingsley	Concert Hall, Ockham Hall	Third Friday	Dr. Watson	6	10	45	16	30	46	4	12	12
Kings Somborne	Village Hall	First and Third Tuesday	Dr. Tate	28	7	342	180	254	434	22	20	16
Kings Worthy	Jubilee Hall	First Thursday	Dr. Avery	28	10	258	124	167	291	11	26	23
Lee-on-Solent	Lowry Hut	First and Third Tuesday	Dr. Ashworth	59	9	479	448	185	633	22	28	21
Leckford	The White House	Third Tuesday	Dr. Simpson	3	1	125	32	112	144	11	13	11
Liphook	Church Room	First and Third Tuesday	*Dr. A. C. V. Gossett	30	11	476	318	218	536	19	28	25

(5) Centre opened 12th May, 1947.
(6) Centre opened 19th September, 1947.

Liss ...	...	Bishearne Hut	Second and Fourth Friday	*Dr. Corry	40	15	680	443	318	761	21	36	32
Lockerley ...	...	Memorial Hall	Fourth Wednesday	Dr. Tate	14	3	175	77	118	190	11	19	17
Longstock ...	...	Old Church School	Third Friday	Dr. Tate	4	2	109	48	86	129	11	12	10
Longparish ...	...	Village Hall	Second Wednesday	Dr. Cockayne	12	7	192	60	201	266	11	24	18
Lymington ...	...	Parish Hall	Every Friday	Dr. Ball	89	10	2019	1305	1088	2393	45	53	44
Lyndhurst ...	...	Church Hall	First and Third Wednesday	Dr. Campbell	25	8	525	357	238	595	22	27	24
Marchwood ...	...	Church Hall	First and Third Tuesday	Dr. Druitt	24	10	347	196	223	419	22	19	15
Maybush ...	...	St. Peter's Institute	First and Third Wednesday	Dr. Tate	32	5	745	513	327	840	22	37	34
Micheldever ...	...	Northbrook Hall	Third Thursday	Dr. Cockayne	21	8	294	125	206	331	11	30	27
Milford-on-Sea ...	...	Church Hall	Fourth Thursday	Dr. Ball	20	15	242	94	191	285	10	28	24
Minstead ...	...	The Hut	Second Thursday	Dr. Campbell	9	1	141	76	83	159	11	13	13
Mottisfont ...	...	Village Club	Second and Fourth Tuesday	Dr. Tate	14	3	293	203	185	388	22	18	13
Netley ...	...	Jubilee Hall	First and Third Wednesday	Dr. Farmer	84	37	825	650	258	908	22	41	37
New Milton ...	...	The Church Hall	Second and Fourth Wednesday (at 2 p.m.)	Dr. Ball	107	48	1265	762	767	1529	21	72	60
North Baddesley ...	...	Symes Memorial Hall	First and Third Friday	Dr. Glen	16	3	345	245	204	449	22	20	16
North Waltham ...	...	British Legion Hall	Third Wednesday	Dr. Hunt	10	4	127	82	130	212	10	21	13

CENTRE	WHERE HELD	WHEN HELD All meetings commence at 2.30 p.m. unless otherwise stated	Medical Officer	Number of New Cases		Total Attendances			All Children	Total Number of Sessions	Average Attendance per Session		
				Children		Mothers	Total	Children			Children	Mothers	
				Under one year	One to five years			Under one year					One to five years
Nursling	Parish Hall	Second and Fourth Tuesday	Dr. Tate	28	7	483	268	355	623	22	18	11	
Oakley	Village Hall	Fourth Wednesday	Dr. Hunt	25	8	198	100	121	221	11	20	19	
Odiham	The Hut, Dunleys Hill	Second and Fourth Friday	Dr. Boyle	44	4	362	295	73	368	23	12	11	
Overton	St. Mary's Hall	First and Third Friday	Dr. Cockayne	54	20	754	426	522	948	21	42	34	
Over Wallop	Church Room	First Tuesday	Dr. Tate	12	4	181	97	116	213	12	18	15	
Pennington	Women's Institute	Second and Fourth Tuesday	Dr. Druitt	39	9	557	370	259	629	22	28	25	
Petersfield	Ramshill	Every Wednesday	*Dr. R. Campbell- Cooke	116	25	2203	1515	862	2377	47	51	47	
Portchester	"The Cormorant," Castle Street	Every Thursday	*Dr. J. Pike	154	56	2647	1948	894	2842	46	64	60	
Preston Candover	Red Cross Hall, South Hall	Second Monday	Dr. Hunt	13	6	143	79	124	203	10	20	14	
Purbrook	Deverell Hall	First and Third Tuesday	Dr. Nisbet	77	37	745	596	220	816	24	34	31	
Ringwood	Conway Hall	Second and Fourth Wednesday	Dr. McNab	58	36	730	518	325	843	21	40	33	
Romsey	33 The Abbey	Every Thursday 9.30 a.m. & 2 p.m.	Dr. Tate	129	16	2479	1791	892	2683	92	29	25	
Rowlands Castle	Parish Hall	Third Friday	Dr. Nisbet	25	2	350	185	192	377	12	31	29	

Sarisbury	British Legion Hall	First and Third Thursday	Dr. Avery	52	7	359	273	105	378	22	17	16
Selborne	Village Hall	Second Wednesday	Dr. Watson	22	14	350	93	109	202	11	18	13
St. Marybourne	Parish Room	Second Thursday	Dr. Cockayne	30	10	339	141	272	413	11	38	30
Shedfield	Chase Hut	Second and Fourth Wednesday	Dr. Parry	12	1	350	145	272	417	20	21	19
Sheffield-on-Loddon	Baptist Chapel	Second Thursday	Dr. Hunt	25	3	237	148	95	243	11	22	21
Soberton	The Barn, Meon Place	Third Tuesday	Dr. Parry	6	2	90	43	70	113	11	10	8
Southwick	Council Rooms	Fourth Friday	*Dr. J. Kinnear	6	1	88	44	55	99	10	10	9
Sparsholt	Sparsholt Manor	First Monday	Dr. Avery	13	5	177	70	136	206	12	27	24
⁽⁷⁾ Stoneycross	The Gymnasium	Fourth Thursday	Dr. Campbell	17	17	45	23	23	46	2	23	23
Stubbington	Reading Room	First and Third Thursday	Dr. Mackay	43	1	697	423	303	726	24	30	29
Sutton Scotney	Victoria Hall	Third Tuesday (2 p.m.)	*Dr. G. Edelsten	25	5	270	132	175	307	11	28	25
Swanmore	Parish Hall	Third Thursday	Dr. Parry	8	2	133	63	85	148	11	13	2
Sway	Women's Institute	Second Tuesday	*Dr. Ball	14	11	222	95	169	264	11	24	20
Tadley	Methodist Hall	First and Third Tuesday	Dr. Boyle	36	9	345	190	240	430	15	29	23
Titchfield	Parish Hall	First and Third Monday	Dr. Mackay	28	8	489	284	245	529	23	24	21
Totton	C.C. Health Centre	Every Friday 10 a.m. & 2 p.m.	Dr. Campbell	184	61	3541	2743	1378	4121	92	45	39

(7) Centre opened 23rd October, 1947.

CENTRE	WHERE HELD	WHEN HELD All meetings commence at 2.30 p.m. unless otherwise stated	Medical Officer	Number of New Cases			Total Attendances			All Children	Total Number of Sessions	Average Attendance per Session	
				Children		Total	Children		Mothers			Children	Mothers
				Under one year	One to five years		Under one year	One to five years					
Upper Clatford ...	The School	First Tuesday	Dr. Simpson	20	4	214	141	98	239	11	20	20	
Upton Grey ...	Village Hall	Third Friday	Dr. Boyle	4	3	90	25	70	95	11	9	8	
Waterlooville ...	St. George's Hall	Second, Fourth and Fifth Thursday	Dr. Ashworth	77	21	2706	442	311	753	24	31	29	
West End ...	Parish Hall	Second and Fourth Wednesday	Dr. Farmer	36	4	795	394	459	853	22	38	36	
West Tytherley ...	King Edward's Hall	Third Wednesday	Dr. Tate	12	6	156	77	153	220	10	22	16	
West Wellow ...	Reading Room	Second and Fourth Friday	Dr. Tate	16	—	249	102	231	333	21	15	11	
Whitchurch ...	Church Hall	Second Friday	Dr. Simpson	38	—	389	192	246	438	12	37	32	
Whitehill ...	Men's Club	Second and Fourth Thursday	Dr. Watson	57	6	822	545	460	1005	23	43	47	
Wickham ...	Church Hall	First and Third Wednesday	*Dr. J. Kinnear	57	19	682	464	308	772	22	35	31	
Woolton Hill ...	Parish Hall	Second Wednesday	Dr. Cockayne	37	20	312	161	234	405	11	37	29	
(8) Worthy Down ...	The Camp	First Monday	Dr. Cockayne	8	13	25	14	18	32	2	16	2	
Yateley ...	Parish Hall	First Tuesday	Dr. Avent	40	31	343	217	151	368	12	30	28	
			TOTAL ...	6559	1720	102575	68950	41970	110929	2866	39	36	

* General Practitioner.
(8) Centre opened 8rd November, 1947.

B.—Children Separated from their Parents.*(a) Children in the Care of Foster Parents.*

At the end of 1947 there were 329 children known to be in 157 foster homes in the County, the cases being distributed as follows :—

119	foster mothers each had one child	...	...	119	children
9	" " " " " two children	...	...	18	"
6	" " " " " three	"	...	18	"
7	" " " " " four	"	...	28	"
3	" " " " " five	"	...	15	"
4	" " " " " six	"	...	24	"
9	" " " " " over six	"	...	107	"
<hr/> 157 <hr/>				<hr/> 329 <hr/>	

In the homes where there are five or more children, or where it was known that full-time staff are employed to care for the children, these were registered as residential nurseries run for profit.

One foster child died in a foster home during 1947, a post-mortem and an inquest being held.

In addition to these, there were, at the end of 1947, 26 boarding schools and voluntary children's homes in the County, the total number of children in these homes and schools being 375.

The voluntary homes are one home established by Dr. Barnardo's Association, two homes maintained by the National Children's Homes and Orphanage Association, and one by the Church of England Children's Society. There was a total of 174 children under nine years of age in these four homes. These homes and boarding schools are inspected periodically by one of the Assistant County Medical Officers.

(b) Adoption of Children.

The following summary shows the action taken during 1947.

1. Where arrangements made other than through Adoption Society, or Hampshire County Council ... 71 cases

Sub-divided as follows :—

Through private arrangement with parents, etc.	...	...	50
Foster parents adopting foster children	...	...	11
Arranged through Southampton Education Office	...	...	6
Arranged through Portsmouth Health Dept.	...	...	2
Arranged through Bournemouth Health Dept.	...	...	1
Arranged through Warwickshire Health Dept.	...	...	1
			<hr/> 71 <hr/>

Adoption Orders made in ...	...	...	43 cases
Under supervision at end of year	...	...	27 "
Removed out of County with adopters	...	...	1 "
			<hr/> 71 <hr/>

In 10 of the above mentioned cases a Third Party was interested.

Adoption Order made in ...	...	...	7 of these cases
Under supervision	...	...	2 cases
Moved out of County	...	...	1
			<hr/> 10 <hr/>

2. Where arrangements made through a Registered Adoption Society	...	...	...	...	...	...	...	40
Sub-divided as follows :—								
National Adoption Society, London	...	...	...	...	...	...	...	5
Church of England Children's Society	...	...	...	...	...	...	...	4
National Adoption Society, Bath	...	...	...	...	...	...	...	1
National Children's Adoption Society, Knightsbridge	...	...	...	...	...	...	...	3
Homeless Children's Aid and Adoption Society	...	...	...	...	...	...	...	3
Portsmouth Diocesan Adoption Society	...	...	...	...	...	...	...	16
National Children's Home, Highbury	...	...	...	...	...	...	...	2
Catholic Rescue Adoption Society	...	...	...	...	...	...	...	3
Father Hudson's Homes, Birmingham	...	...	...	...	...	...	...	2
Church Adoption Society, Bloomsbury	...	...	...	...	...	...	...	1
								—
								40
								—
Adoption Order made in	...	...	...	...	...	...	...	19 cases
Under Supervision at end of year	...	...	...	...	...	...	...	21 cases
								—
								40
								—
3. Cases where Hampshire Public Health Department introduced interested parties after usual investigations	...	...	...	...	...	...	...	12
Order made in	...	...	...	...	...	...	...	5 cases
Under supervision at end of year	...	...	...	...	...	...	...	7 cases
								—
								12
								—
4. In 12 cases where it was reported that a child was going to adopters out of the County Area a special report as to the suitability of the home offered was obtained from the local authority concerned, and enquiries made about health of child and suitability for adoption, before the child was transferred to prospective adopters.								

RESIDENTIAL NURSERIES.

Paddington Nursery, Boldre Grange, Lymington.

Owing to the small number of evacuated children accommodated in this Nursery, the Ministry of Health considered that continuation of the requisitioning of these premises for its original purpose was not justified. As, however, the Nursery was used for Public Assistance cases, with the Ministry's approval the County Council took over the requisition and as from the 1st June 1947 this Nursery has been used by the Public Assistance Committee for children in their care.

The residual evacuees were transferred to Hawley Hill House Residential Nursery, this being the only remaining evacuation Nursery in this County.

During the year 44 children were discharged from Paddington and Hawley Hill House Nurseries.

- 22 returned to the care of their parents,
- 6 were transferred to billets,
- 4 to adopters or proposed adopters and
- 12 to other Nurseries, Nursery Leavers' Hostels and other Institutions.

Milesdown Short-Stay Nursery, Winchester.

During the past year 124 children have been accommodated, the average length of stay being 40.65 days. Of these 124 children—

- 89 were admitted under the authority of the Health Committee,
- 28 on the request of the Public Assistance Officer,
- 6 on the request of Winchester City Council,
- 1 on the request of Aldershot Borough Council.

Reasons for Admission.

(1) Confinement of mothers (enabling a number of mothers to have their confinements at home)	62
(2) Illness of mothers	44
(3) Awaiting transfer to other institutions or being cared for at the request of the Public Assistance Officer	18

There were three cases of chicken pox early in the year and the children were nursed in the Nursery. Later 6 cases of measles occurred. The children suffering from measles were transferred to Isolation Hospitals and the Nursery was not closed. Parents who had booked accommodation for their children were informed, and if the children had not already had measles the parents were asked to agree to the children receiving a dose of immunising serum.

There were also three cases of whooping cough and these children were transferred to Hospital.

DAY NURSERIES.

The following 12 Day Nurseries, providing 435 places, have been continued throughout the year and have been well used. There have been waiting lists for admissions in most of the Nurseries.

Apart from small epidemics of measles, chickenpox and whooping cough, the health of the children has been good.

Name of Nursery	Accommodation provided		Average Daily attendances	
	0—2 yrs.	2—5 yrs.	0—2 yrs.	2—5 yrs.
ALTON Manor House Cafe		20		17.18
ANDOVER				
1. The Drove	15	25	6.67	21.5
2. New Street		40		25.66
BASINGSTOKE				
1. Sarum Hill		30		25.9
2. Bolton Crescent		30		22.4
CHRISTCHURCH The Square House		36		26.15
EASTLEIGH Tankerville House		50 (18 mths-5 yrs.)		37.6
FARNBOROUGH				
1. Hollymount		30		23.5
2. Kingsmead	17	23	12.45	15.62
GOSPORT				
1. Elmsleigh		35		25.25
2. Podd's House	18	46	14.75	46.9
PETERSFIELD The Institution		20		18.5

Children are admitted to the Nurseries in the following order of preference :—

- (1) Children whose mothers are obliged to work.
- (2) Children whose mothers are ill or unable for some special reason to care for them themselves.
- (3) Overcrowded home conditions.
- (4) Children suffering from some disability who have been especially recommended.

If any children are admitted who do not come within the above groups, it is on the understanding that the child will have to be withdrawn if the place is required by another child with a definite reason for admission.

C.—Babies Subject to Special Risks.

1. ILLEGITIMATE BABIES.

The number of these born alive in the Administrative County in 1947 was 761 as compared with 956 in 1946, and the number of illegitimate live and still births per 1,000 total live and stillbirths in the County was 65, as compared with 85.

No progress has been made in the provision of hostels where unmarried mothers can stay and look after their babies during a period of training in mothercraft.

Pending the establishment of these hostels an arrangement was made, in co-operation with the Diocesan Moral Welfare Councils, to give grants to deserving cases where the unmarried mother kept her own baby, during the period when she was breast feeding the child and therefore not able to earn sufficient to support herself and the child.

During 1947, 22 cases were helped, and the average weekly grant being 22s. 6d. At the close of the year six cases were being so helped. A total of £292 0s. 0d. was thus expended.

During the year 1947 the Roman Catholic Maternity Home for Unmarried Mothers at Grayshott admitted 102 cases; 22 cases were admitted to the Diocesan Maternity Home, Winchester; and the Baptist Home for Unmarried Mothers at Yately admitted 58 cases during the year.

During the year payment was made towards the fees of foster mothers caring for illegitimate babies in 17 cases; a total of £141 7s. 11d.

At the close of the year there was a record of 428 illegitimate children born in the County during the year, and of these, at the end of the year 190 were still with their mothers, 12 were with foster mothers, 94 had been placed with adopters or had gone to a Registered Adoption Society, 3 were living with relatives apart from their mothers, 87 had left the County, and 34 had died; 8 had become legalised by the marriage of their mothers.

Sick Babies.

During 1947, 17 children were admitted to Hospitals or Children's Hostels, the total cost to the Health Committee being £313 15s. 0d..

The arrangement for admission of babies under two years of age to the British Red Cross Nursery at Christchurch was continued during the year and four children were admitted, being cared for in the Nursery for a total of 79 weeks. At the request of the British Red Cross Society the maintenance charge was raised from 20/- to 30/- in April, and subsequently again raised to 40/- per case per week. A total of £132 10s. 0d. was expended.

The Proprietress of a private registered Nursing Home at Ramsdell, who is a Trained Nurse and who has had special experience in the care of ailing children, is now receiving into her care young children recommended for convalescent treatment. Three cases were admitted there in 1947, staying for a total of 37 weeks at a cost of £69 3s. 0d.

2. PREMATURE BABIES.

The proportion of premature births to all live births has slightly increased. In 1946 of 8363 births notified in the area of the County as Maternity and Child Welfare Authority 360, or 4.3% were premature, i.e. the weight was 5½lbs or under, whereas in 1947 out of 8826 notifications 410 were in respect of babies weighing 5½lbs or less, i.e. 4.65%. The immediate survival of these infants is summarised in the following tables:—

Weight Group	No of Babies born alive	No. of Babies who Died during :											No. surviving at end of 4th week	Percentage of Survival
		1st day	2nd day	3rd day	4th day	5th day	6th day	7th day	2nd week	3rd week	4th week	Total		
Under 2 lbs.	12	10	-	1	1	-	-	-	-	-	-	12	—	0
Over 2 lbs. & under 2½ lbs. ...	11	6	4	1	-	-	-	-	-	-	-	11	—	0
„ 2½ lbs. „ 3 lbs. ...	12	3	2	-	-	-	-	-	-	-	-	5	7	58.33
„ 3 lbs. „ 3½ lbs. ...	17	3	3	1	1	2	-	-	-	-	-	10	7	41.17
„ 3½ lbs. „ 4 lbs. ...	25	4	1	1	-	1	-	-	1	-	-	8	17	68
„ 4 lbs. „ 4½ lbs. ...	47	5	4	3	2	-	-	-	-	-	1	15	32	68.85
„ 4½ lbs. „ 5 lbs. ...	83	3	6	2	1	1	-	1	-	2	-	16	67	80.72
„ 5 lbs. „ 5½ lbs. ...	200	3	1	-	1	1	-	2	2	-	1	11	189	94.5
Not weighed but under 5½ lbs.	3	3	-	-	-	-	-	-	-	-	-	3	—	0
Total	410	40	21	9	6	5	-	3	3	2	2	91	319	77.8

The survival rate for babies born at home and nursed there, born in Maternity Homes or Hospitals or transferred to Hospitals, is shown in the following Table :—

Birth Weight	(1)		(2)		(3)		(4)		(5)		(6)		(7) (Total of Cols. 3—6)		(8)	
	Born and Nursed at home		Born at home and transferred to hospital within 4 weeks		Born in County Council Maternity Homes		Born in Private Nursing Homes		Born in Public Assistance Institutions		Born in Hospitals		Born and kept in Nursing and Maternity Homes, and Hospitals		Total Number	Percentage of survival at end of 1 month
	Number	% of survival at end of 1 month	Number	% of survival at end of 1 month	Number	% of survival at end of 1 month	Number	% of survival at end of 1 month	Number	% of survival at end of 1 month	Number	% of survival at end of 1 month	Number	% of survival at end of 1 month		
	—	%	—	%	*8	62.5	—	%	*1	0	—	%	*9	55.5	*9	55.55
Under 2 lbs. ...	8	0	2	0	—	—	2	0	—	—	—	—	2	0	12	0
2 —2½ lbs. ...	6	0	2	0	—	—	1	0	—	—	1	0	2	0	10	0
2½—3 lbs. ...	2	50	4	100	1	0	2	50	—	—	1	100	4	50	10	70
3 —3½ lbs. ...	6	33.3	5	40	2	50	2	50	—	—	2	50	6	50	17	41.2
3½—4 lbs. ...	7	42.8	8	75	5	100	3	66.7	—	—	2	50	10	80	25	68
4 —4½ lbs. ...	21	66.7	7	42.8	3	66.7	8	87.5	1	100	4	75	16	75	44	68.2
4½—5 lbs. ...	36	83.3	3	0	15	93.3	18	77.8	—	—	10	80	43	83.7	82	80.5
5 —5½ lbs. ...	109	98.1	7	42.8	29	96.6	36	91.7	—	—	17	94.1	82	93.9	198	94.5
Not weighed ...	2	0	1	0	—	—	—	—	—	—	—	—	—	—	3	0
TOTAL ...	197	80	39	46.2	63	87.3	72	80.6	2	50	37	81.1	174	82.2	410	77.8

* Born at home and later admitted to C.C. Home.

INFANTILE MORTALITY.

The number of children dying under the age of twelve months during 1947 was 32 (26 M. 7 F.) in Aldershot, 12 (7 M. 5 F.) in Winchester, and 197 in other Urban Districts. In all Rural Districts the number was 168.

The Infant Mortality Rates for Aldershot Winchester, other Urban Districts, all Rural Districts, and the County as a whole, were as follows :—

41.4—24.8—34.9—33.3—34.2

Over the County as a whole the causes of death, as given by the Registrar General, were as follows :—

Cause of death	Number of deaths		Infant Mortality Rate	
	1946	1947	1946	1947
Congenital malformation etc. (32) ...	119	156	10.6	13.1
Premature birth (31)	112	107	10.0	9.0
Respiratory conditions (21,22,23) ...	44	52	3.9	4.3
Diarrhoea (25)	18	26	1.6	2.2
Infectious diseases (1—12)	12	19	1.1	1.6
Other recorded causes	10	30	1.0	2.5
All other causes	13	19	1.1	1.6
Total	328	409	29.3	34.2

The figures given in this table show that there was no one cause of the increase in Infant Mortality in 1947. There was an increase in each group shown in the table, some more and some less, except for the deaths from prematurity.

Of all the deaths in 1947 i.e. 6,517, the number of deaths under one year of age, 409, was 6.3 per cent as against 5.3 per cent in 1946.

Neonatal Mortality.

The number of babies dying under the age of one month in 1947 as reported by the Registrars of Births and Deaths was 190. These can be subdivided in the following way :—

Dying before 24 hours	105
„ from one day to two weeks	74
„ „ two weeks to one month	11

The causes of death as certified vary according to the age at death in the following manner :—

Cause	Age at Death			
	Under 24 hrs.	1 day to 2 weeks	2 weeks to 1 month	Total
Prematurity	52	12	—	64
Congenital Deformities	10	13	3	26
Cerebral Haemorrhage	4	7	—	11
Inanition, marasmus, etc.	6	9	2	17
Bronchitis, Broncho-pneumonia ...	—	11	4	15
Erythroblastosis, Icterus	1	5	—	6
Atelectasis	18	7	—	25
Convulsions	1	5	—	6
Asphyxia Neonatorum	12	—	—	12
Other Causes	1	5	2	8
TOTAL	105	74	11	190

It would appear from this Table that general feebleness of the infant (inanition, atelectasis, asphyxia neonatorum) was the cause of death in 54 infants under one month of age in 1947, as against 16 in 1946. Other causes, such as congenital deformities, cerebral haemorrhage, etc, appeared to be no more frequent and prematurity as such was less frequent. This may mean either a generalised deterioration in the infants born, or that less care was taken of the new born children who needed more than normal care and attention.

Stillbirths.

The following Table shows the trend of stillbirths in the Administrative County since 1940.

Year	1940	1941	1942	1943	1944	1945	1946	1947
Number of stillbirths ...	280	288	262	276	263	253	291	293
Proportion of still to 100 live births	3.3	3.1	2.7	2.9	2.5	2.6	2.6	2.5
Stillbirth rate, <i>i.e.</i> number of stillbirths per 1,000 of the population	0.54	0.54	0.49	0.53	0.51	0.49	0.54	0.53

MATERNAL WELFARE.

(A) MEDICAL SUPERVISION OF EXPECTANT MOTHERS.

During 1947, 3,762 mothers attended Clinics provided by the County Council for medical ante-natal examination, of whom 380 attended for post-natal examination. Under the Council's arrangements for examinations elsewhere than at Clinics, 1,327 were seen ante-natally of whom 869 were also seen post-natally. In addition 311 women attended Clinics situated in the area of another Welfare Authority, of whom 4 attended post-natally, and 201 attended ante-natally at Clinics provided by other Authorities.

In all, 5,601 women living in the area of the Welfare Authority received medical ante-natal care in 1947.

The following Clinics were operating in the area of the Welfare Authority in 1947 :—

<i>Clinic</i>	<i>Place of Meeting</i>	<i>Day of month when held at 2 p.m.</i>	<i>Medical Officer in charge during 1947</i>
Alresford ...	Methodist Church Hall	1st, 3rd and 4th Mondays	*A. M. Hughes
Alton ...	Inwood Cottage Hospital Out-Patient Department	2nd and 4th Tuesdays 1st and 3rd Thursdays	T. C. Wilson W. S. Larcombe H. Larcombe
Andover ...	C.C. Health Centre, 70 Junction Road	2nd and 4th Mondays 1st and 3rd Mondays	A. B. Simmons M. F. Hope
Basingstoke ...	C.C. Health Centre, Brambly Grange	Every Wednesday 3rd Thursday 2nd and 3rd Tuesday	H. K. Williams *H. M. P. Hunt *H. M. P. Hunt
Christchurch ...	C.C. Health Centre, Millhams Street	1st Wednesday 2nd Wednesday 3rd Wednesday 4th Wednesday	N. S. Deane E. W. Deane M. Mitchell G. N. Brooks
Cove ...	Labour Hall	1st and 3rd Monday	*S. Boyle
Eastleigh ...	C.C. Health Centre, Chamberlayne Road	1st Monday 3rd Monday 2nd, 4th and 5th Mondays	L. E. Green S. J. Golden A. G. Proverbs
Emsworth ...	Community Centre	2nd Monday 4th Monday	A. Newsholme E. B. McDowall (Opened 28th July, 1947)
Fareham ...	Methodist Hall, Kings Road	2nd, 3rd and 4th Mondays	P. J. Filose
Farnborough ...	St. Mark's Club Rooms	1st, 2nd and 3rd Thursdays	J. M. Forsyth
Fleet ...	Church Institute	2nd and 4th Tuesdays	L. W. B. Dobbin
Gosport ...	War Memorial Hospital Out-Patients Dept.	1st Thursday 2nd Thursday 3rd Thursday 4th Thursday	N. W. Berry and M. R. Behrendt B. Johnson and R. A. Wilson N. L. Russell C. N. Suter and S. Fuller
Hamble ...	Village Memorial Hall	4th Thursday	E. Turner
Hartley Wintney	Edward Memorial Hall	3rd Tuesday	R. H. Scott
Havant ...	C.C. Health Centre, Park Way	2nd Monday 4th Monday	M. S. Dewhurst P. Fawcner Corbett
Hayling ...	Lindisfarne, Beach Road, South Hayling	1st Friday } 3rd Friday }	D. H. Brenan
Liphook ...	Church Room	1st and 3rd Thursday	*P. Watson
Liss ...	British Legion Hall	1st Wednesday	H. B. Corry
Lymington ...	Parish Hall	2nd Wednesday 3rd Wednesday 4th Wednesday	H. L. Hodgkinson B. M. Thornton G. H. Pitt
Petersfield ...	Ramshill	1st Tuesday 3rd Tuesday	R. C. Cooke C. J. Ormerod
Portchester ...	The Cormorant	1st, 2nd, 3rd and 4th Wednesdays	J. E. Pike
Ringwood ...	Conway Hall	1st Monday	J. C. Kitchin
Salisbury ...	British Legion Hall	2nd Tuesday	D. I. T. Edwards
Totton ...	C.C. Health Centre, Rumbridge Street	1st, 2nd, and 3rd Mondays	G. Habgood
West End ...	Parish Hall	1st Tuesday	H. E. Bamber
Whitehill ...	Men's Club	1st and 3rd Mondays 9.30 a.m. and 2 p.m.	*P. Watson

* Assistant County Medical Officer.

Blood Tests.

The following Tables show the results of examination of blood samples taken from expectant mothers attending Ante-Natal Clinics :—

Haemoglobin			Under 40%	40% to 50%	50% to 58%	58% to 75%	Over 75%
No. of Cases	...	...	3	10	20	381	294
Percentage	...	...	0.4%	1.4%	2.8%	53.8%	41.6%

Red Cells			Less than 3,000,000	3,000,000 to 3,500,000	3,500,000 to 4,000,000	4,000,000 to 4,500,000	Over 4,500,000
No. of Cases	...	...	2	13	61	340	259
Percentage	...	...	0.3%	2.0%	9.0%	50.4%	38.3%

Ferrous Sulphate Tablets are distributed at the Ante-Natal Clinics on the Medical Officer's advice, and are sold at cost price. 53,640 Tablets were sold during 1947.

Osto-Calcium Tablets are also provided for sale at Ante-Natal Clinics on the recommendation of the Medical Officer, and during the year 19,024 tablets were sold.

Special maternity belts are supplied through Clinics on the recommendation of the Medical Officer, and during 1947, 76 belts were supplied.

Not every woman who attends an Ante-Natal Clinic has a sample of blood taken for estimation of haemoglobin and a count of red cells, and there may be more than one sample from a patient. These figures therefore do not give any information as to the prevalence of anaemia, but so far as they go, indicate that there has been little change in this way in the past year.

Examination for Wasserman Reaction.

			1947	1946	1945
Samples of blood examined	...	...	1,660	1,936	1,289
No. found positive	...	...	17	16	6
Percentage of samples found positive	...	...	1.02	0.83	0.5

Details with regard to the treatment, etc., are as follows :—

Case number	W.R. positive		Commenced treatment	Babies Born		V.D.C. Post natal attendance	Babies			REMARKS
	At A.N.C.	From other source		Alive	Stillborn		+ve lived	+ve died	-ve died	
43	23.12.46	—	17.1.47	17.5.47	—	Yes	—	—	—	18.2.47 Died
44	16.1.47	—	No	11.2.47	—	—	—	—	—	Mother +ve 1945—had stillbirth.
47	6.3.47	—	7.5.47	30.9.47	—	Yes	—	—	—	Baby later—ve
49	22.4.47	—	23.4.47	25.8.47	—	Yes	Yes	—	—	—
50	8.4.47	—	7.5.47	20.5.47	—	Yes	Yes	—	—	—
51	22.4.47	—	13.5.47	13.10.47	18.11.47	—	—	—	—	—
52	20.5.47	—	9.6.47	—	—	Yes	—	—	—	Illeg. Mother has history of stillbirths.
53	1.5.47	—	21.5.47	—	8.6.47	—	—	—	—	—
55	13.6.47	—	2.7.47	20.8.47	—	Yes	—	—	—	—
57	2.9.47	—	No	19.9.47	—	—	—	—	—	Moved S'ton after confinement.
60	8.12.47	—	No	4.1.48	—	—	21.1.48	—	—	Illeg. baby
0.10	—	19.6.47	2.7.47	—	July, 1947	—	—	—	—	—
0.11	—	10.3.47	March 47	12.6.47	—	Yes	—	—	—	Illeg. baby. Moved to S'ton.
0.12	—	13.10.47	Oct. 47	25.5.48	—	Yes	—	—	—	Illeg. baby
0.15	—	Sept. 47	27.8.47	15.11.47	—	Yes	—	—	—	—
0.16	—	30.9.47	30.9.47	18.7.47	—	Yes	Yes	—	—	Illeg. baby. Mother +ve

In the last five cases we obtained information from the following sources:—one case moved from Sheffield and the M.O.H. gave details, two cases were reported by Welfare Workers dealing with the patients, one patient herself reported that she was attending V.D.C. and one case was notified by the M.O. of the V.D.C. after the mother had attended with her baby.

Summary of Cases at end of 1947.

Since 1942—

Total No. of live births	...	...	...	57	Stillbirths	...	...	4
No. of Children who died later	...	...	...	5				
No. of children who left County area	...	...	...	12				
No. of children remaining in County	...	...	...	40				

Children born in	No. of cases	1st W.R. +ve	1st W.R. - ve	Discharged from V.D.C.	Under observation at V.D.C.	Remarks.
1942	2	1	1	2	—	Attending school
1943	2	—	2	2	—	—
1944	6	—	6	4	2	—
1945	6	1	5	4	2	—
1946	15	3	11	3	12	One case would not co-operate
1947	9	2	6	—	8	One case would not co-operate

Blood samples for the Wasserman Test are whenever taken at Clinics, taken indiscriminately, so that it is safe to say that the proportion of women attending Ante Natal Clinics in 1947 who gave indications of infection with syphilis was 11 out of 1,654, i.e. 0.67 per cent.

The remaining six cases were selected cases specially reported and not found in the routine sampling. It cannot therefore be said that these examinations show any indication of an increase in syphilitic infection among the women attending Ante Natal Clinics in 1947.

B. DOMICILIARY MIDWIFERY.

The County Nursing Association was responsible through its whole-time midwives and through the District Nurse Midwives employed by District Nursing Associations for attending in their own homes 4,191 women as midwives, and 1,087 as maternity nurses. In addition, women attended by nurses employed by other Welfare Councils under arrangements made with the Local Supervising Authority and by nurses in private practice numbered 347 and 231 respectively where the nurses acted as midwife, and 31 and 129 where she acted as maternity nurse. For domiciliary cases medical aid was sought in 2,622 cases which is a somewhat higher proportion than in 1946.

During 1947 there were 88 midwives employed by the County Nursing Association or District Nursing Associations who held the certificate enabling them to give gas and air analgesia and this was administered in 689 cases.

As it is most desirable for midwives to be trained in the use of gas and air analgesia, arrangements were made for 43 midwives to attend residential courses during 1947. These were held at:—

St. Mary's Hospital, Portsmouth	...	...	...	6
Woking Maternity Home, Woking	...	...	...	3
Royal Northern Hospital, Holloway, London	...	...	...	17
Redhill County Hospital, Redhill	...	...	...	16
Ipswich Nursing Home—	...	...	...	1

All these midwives obtained the necessary certificate of proficiency.

Sterilised maternity outfits were supplied to 1,192 patients.

During 1947, the Central Midwives Board revised their Rules and Regulations, particularly in relation to Section E, the general result of which is that Rules referring specifically to detailed technique of practice have been removed and the scope of the Rules has been generally limited to the principles governing a midwife's professional work.

Women undertaking work as maternity nurses only must now notify the Local Supervising Authority and are subject to certain rules, and to inspection by the County Supervisor of Midwives.

C. LECTURES TO MIDWIVES.

During 1947 arrangements were made by the Southampton Branch of the College of Midwives for lectures to be given at the Castle, Winchester. Seven lectures were given, the subjects being (1) The College of Midwives—Its function and organisation, (2) The Importance of Fear as a Complication of Labour, (3) Care and Maintenance of Cars, (4) Can Psychology help the Midwife, (5) Breast Feeding, (6) Drugs used in Midwifery, and (7) The Duties of Health Visitors and their Relationship to the District Nurse.

D. DOMESTIC AND HOME HELP SCHEMES.

During the year considerable progress was made in the development of the Domestic and Home Help Schemes in the County Area. In my report for last year I reported on the Schemes in operation at Gosport M.B., Eastleigh M.B. and Farnborough U.D. Further Schemes were started at Andover M.B., Basingstoke M.B. and Fareham U.D. during the year under review.

During the year ended 31st December, 1947, 707 cases received help, 276 maternity cases, 431 other cases. The figures for the previous years were as follows: 1945—122, 1946—445.

During 1947 161 whole-time and part-time helpers were employed.

The Schemes at Gosport, Eastleigh and Farnborough continued to develop and good progress was made in the Scheme starting on the 1st April at Fareham. Progress at Andover M.B. and Basingstoke M.B. has been slow though improving now in the latter area.

There is little doubt that a tremendous amount of good work is being done through this Scheme and the County has been very fortunate in obtaining good Organisers. Much interest has been created in the work done in this County by reports, etc. and following a Conference of Organisers, notes on the establishment and development of Domestic and Home Help Schemes have been circulated to all interested Authorities.

INSTITUTIONAL ACCOMMODATION FOR MATERNITY PATIENTS.

The situation with regard to the provision of beds was as follows in January, 1948.

Accommodation available :—

	Beds
Barton-on-Sea—The Grove	16
Basingstoke—The Shrubbery	10
Farnborough—Farley House	12
Gosport—The Blake Maternity Home	24
Liss—The Grange	10
Lyndhurst—Hill Rise	9
Winchfield P.A.I.	4
	—
Total	85
	—
Eastleigh—Rookwood	12

The alterations and adaptations were complete, staff appointed and Home being got ready to receive patients. The first patient was admitted on the 20th January, 1948.

Winchester—R.H.C. Hospital... .. 14

The alterations and adaptations were complete but the beds were not available for normal cases owing to lack of staff.

Accommodation in process of being provided :—

	Beds
Alton Infirmary... ..	10
Emsworth—Northlands	10
Fareham—Blackbrook	20
	—
Total	40
	—

(1) *Normal Cases.*

955 women whose confinements were expected to be normal but for other reasons required institutional provision were admitted as follows :—

<i>Name of Institution</i>	<i>No. of Patients.</i>
C.C. Maternity Home, Barton-on-Sea	169
C.C. Maternity Home, Basingstoke	196
Frimley and Camberley Hospital	1
Farnborough Maternity Unit	50
Fordingbridge Cottage Hospital	11
C.C. Maternity Home, Gosport	279
C.C. Maternity Home, Liss	119
C.C. Maternity Home, Lyndhurst	42
St. Mary's Hospital Portsmouth	9
Salisbury General Infirmary	12
Southampton Borough Hospital... ..	1
Winchester St. Paul's Hospital	54
Winchfield Nursing Institution	12

Of these women four were transferred to hospital before the commencement of labour, eleven during labour, and four after the birth had taken place.

293 medical aid forms were issued.

900 babies were born alive and 9 stillborn.

(2) *Complicated Cases.*

726 women whose confinements were expected to be complicated or those where an emergency arose were admitted to Hospital beds as shown below :—

<i>Hospital</i>	<i>Anticipated</i>	<i>Emergency complications</i>	<i>Total</i>
Aldershot Maternity Unit	25	13	38
Andover W.M. Hospital	1	1	2
Boscombe R.V. Hospital	6	7	13
Farnham County Hospital	—	8	8
St. Thomas's Hospital, London	1	—	1
Portsmouth St. Mary's... ..	88	223	311
Reading Royal Berks	5	29	34
Salisbury General Infirmary	6	14	20
Southampton Borough Hospital	—	8	8
Winchester R.H.C.H.	109	182	291

Where women need nursing in an Institution because of some septic or possibly infectious condition they are admitted to one of the following Institutions, which dealt with cases as shown below during 1947 :—

Institution	Phlegmasia Alba Dolens	Puerperal Sepsis Full time Confinement	Puerperal Sepsis Aborton	Puerperal Pyrexia Cause Unknown	Skin Conditions of Mother or Child	Jaundice	Pulmonary Tuberculosis	Puerperal Insanity	Other Conditions	Total
Old Sarum Isolation Hospital ...	1	—	—	—	—	—	—	—	—	1
Portsmouth I.D. Hospital ...	—	1	—	1	1	—	1	1	2	7
Royal Berks Hospital ...	—	2	1	1	—	—	—	—	—	4
Southampton Borough Hospital	—	3	—	—	—	—	—	—	—	3
St. Paul's Hospital, Winchester	—	3	—	—	—	1	—	—	—	4
Victoria Isolation Hospital, Winchester ...	—	—	1	1	—	—	—	—	—	2

Transfusion Fluids and Apparatus.

A supply of plasma is kept at all the Maternity Homes. Whole blood and the services of the Pathologist to give the transfusion, if necessary, were available from the Royal Hants County Hospital, Winchester, for :—

C.C. Maternity Home, Basingstoke

from St. Mary's Hospital, Portsmouth, for :—

C.C. Maternity Home, Gosport

C.C. Maternity Home, Liss

from the Blood Bank at Lympington, for :—

C.C. Maternity Home, Lyndhurst

and available through Consultants at Boscombe Hospital for :—

C.C. Maternity Home, Barton-on-Sea.

Obstetric Emergencies—Blood Transfusion Service.

It was possible to arrange with the Medical Officer of Health for the Borough of *Portsmouth* for a blood transfusion service to be available in case of emergency. Fresh blood, and gum saline transfusion outfits, with ambulance and the necessary equipment were available. A sum of £20 per annum was approved, but in view of the higher cost Committee approved of £13 being contributed in respect of the first six months of 1948.

Arrangements were also made with the Royal Victoria and West Hants Hospital, Boscombe, *Bournemouth*, for a "flying squad" service, including arrangements for blood transfusion. The fees agreed upon were five guineas and mileage for the Obstetrician, five guineas and mileage for a transfusion, one guinea for the Hospital Nurse, and 10/6d. for payment into the blood bank account.

An emergency service was in operation from the National Blood Transfusion Service at *Sutton*, Surrey, which maintained a blood bank.

Fresh whole blood, or plasma (dried), was available from the *Salisbury* General Infirmary.

St. Luke's Hospital, *Guildford*, Surrey is running an emergency transfusion service for the use of doctors undertaking domiciliary midwifery, to cover an area of not more than 20 miles from Guildford. The service is available free of charge.

The services of the "flying squad" from Boscombe Hospital were requested in three cases by the doctors concerned. Transfusions were given and the patient recovered in each case.

A comprehensive service for the testing of blood from the County Council Ante Natal Clinics is under consideration whereby samples sent to the National Blood Transfusion Service at Sutton might be tested for the Rhesus Screening, A.B.O. Grouping, and the Kahn Test. The scheme is not yet in operation but it is hoped to commence at an early date.

During the year 1947 the services of a Consultant were asked for in 33 cases, the nature of the emergency being as follows :—

Collapse, Toxaemia, P.P.H., Uterine inertia, Hyperpyrexia and Oedema, Breech presentation, Disproportion, Eclampsia, A.P.H., Concealed accidental haemorrhage, Pyrexia, Placenta praevia, Transverse Presentation, B.P. with albuminuria, Membranes ruptured at 28 weeks, Phlebitis, Previous stillbirth followed by mental instability, Contracted pelvis, Prolapsed cord, Shoulder presentation, Hydrocephalic, Malpresentation.

Private Nursing Homes.

During the year 1947, 14 new Nursing Homes were registered. The accommodation totalled 82 beds, of which 5 Nursing Homes had a total of 11 maternity beds.

During the year there were 77 Nursing Homes functioning, of which 11 were closed during the year.

The total accommodation in the 77 Homes was 548 beds, of which 170 were allocated for maternity cases.

3,086 patients were admitted during the year 1947, of which 2,032 were maternity cases.

A total of 84 inspections of these Nursing Homes was made.

Maternity Survey.

The Royal College of Obstetricians and Gynaecologists formed a special Committee to study certain social and economic aspects of maternity and child bearing in Britain. A form of survey was drawn up which aimed at collecting information to enable the Committee to make suggestions as to whether, in what ways, it is possible to help mothers with the problems that they meet in bearing children.

In February 1946 the College issued a request to Local Welfare Authorities for help in the completion of the special Questionnaire, with the suggestion that Health Visitors should interview every mother who gave birth to a child during the week March 3rd—9th inclusive. Every Health Visitor was given information about the matter and asked to complete the survey form as far as possible.

When the forms were received back from the Health Visitors details were set out on a printed list supplied by the College and sent to the Royal College; the enquiry was made in about 180 cases.

In March 1948 the Committee asked for a further follow-up enquiry to throw some light on the problems of health and development of full term and premature babies, and to establish the relation between child birth and maternal ill-health. Enquiries were asked for and the information supplied in about 50 cases, selected from the 180 mentioned above.

MATERNAL MORTALITY.

During 1947, 16 women whose homes were in the Administrative County died as the result of conditions connected with pregnancy. This gives a maternal mortality rate of 1.31 per 1,000 total births live and still, which is the lowest so far recorded in this County. There is considerable room for improvement however since the rate for England and Wales for 1947 is 1.17 and several Authorities have recorded rates well below 1.0 per 1,000.

The determining causes of death of the 16 women whose homes were in the Administrative County appear to be as follows:—

TOXAEMIA	6
Eclampsia	4
(3 associated with cerebral haemorrhage and 1 with embolism)	
Other toxæmia conditions	2
(1 hyperemesis and 1 associated with embolism)	
PULMONARY EMBOLISM	3
OBSTETRIC SHOCK	3
ABORTION—NON-SEPTIC	2
SEPTIC	1
PUERPERAL SEPSIS	1
(difficult delivery).	

The classification differs from that adopted by the Registrar General who has included in the deaths from puerperal sepsis three of the cases who had pulmonary embolism, one general peritonitis following abortion, and one woman who died from uraemia associated with acute nephritis and abortion, but does not include the two other cases of embolism associated with toxæmia.

The women who died from shock included 2 who had Caesarean operations for disproportion (one had acute dilatation of the stomach, and one ileus and one who died at home from shock following delivery of a breech with extended legs).

The totals associated with abortion include one from sepsis where there was a possibility of criminal abortion, one who died of uraemia following nephritis, the other from acute dilatation of the stomach following operative measures.

All deaths but two occurred in Hospitals (six in one, two in another and one in each of six others).

History of Provision of Maternity Accommodation in Hampshire.

With the transference of institutional provision for maternity cases to the Regional Hospital Board on 5th July, 1948, it appeared appropriate to review the history of the provision made by the County Council. This history divides itself into three periods, the first prior to the Local Government Act, 1929, by which Public Assistance Institutions became the property of the County Councils; the second extending from that time to the outbreak of war in 1939; and the third and last, since then to July, 1948.

On the 18th November, 1918, the County Council approved of an agreement being made with the Royal Hampshire County Hospital for the reservation of 6 beds for maternity cases requiring special care, or which should receive hospital treatment owing to unsatisfactory home conditions. Towards the cost of adapting the ward and labour room, the County Council contributed the sum of £447 and guaranteed an annual minimum payment of £200, paying for each case a sum of £2 2s. 0d. and per diem. Enquiries had been made previously from various hospitals in and near the County asking for arrangements to be made for beds to be retained for confinements but, owing to the war, no accommodation was available.

On the 4th May, 1921, the County Medical Officer reported that since the above-mentioned ward was opened in July, 1919, 304 cases had been admitted of whom 144 were classified as abnormal. Extensions to provide accommodation

for infectious cases was then under urgent consideration. In January 1922 the arrangements with the Royal Hampshire County Hospital were modified.

In November 1924, the reservation of Hospital beds for abnormal and complicated cases only and the provision of accommodation elsewhere for women needing institutional confinement for domestic reasons, was under consideration but, owing to the opinion of the Ministry of Health being adverse to the provision in separate places of the two categories of women, the Hospital was again approached and a suggestion was made by them that the County Council should guarantee a minimum of 160 cases a year and pay according to the variation in cost. The hospital would extend the provision up to 20 beds and would then restart the Training School; the agreement should be for 7 years certain.

It was eventually decided, however, that on account of the cost, this scheme should not be proceeded with and in 1925 an agreement was reached with the Winchester Maternity Society, who had a Maternity Home at 13, St. Peter's Street, to acquire the adjoining property (No. 12.) and provide therein 8 beds for the exclusive use of County Council patients. This Home was opened on the 25th January, 1926.

Meanwhile the following arrangements had been made at other Institutions. In January 1922 an agreement was made with the Royal Victoria and West Hants Hospital, Boscombe to receive maternity cases, abnormal or where the home conditions were unsatisfactory, at an inclusive fee of £5 per case, increased in May 1923 to £6. Negotiations were opened with Salisbury Infirmary in October, 1923, and arrangements were being made for the use of accommodation in certain Poor Law Institutions in November, 1924.

At the beginning of 1926 the complete list of Institutions to which maternity cases could be admitted was:—

Royal Hampshire County Hospital, Winchester—Abnormal and complicated only.
 Winchester Maternity Home (St. Peter Street)—Normal cases only.
 Salisbury Infirmary
 Fenwick Cottage Hospital, Lyndhurst
 Hambledon Union Infirmary
 Farnham Union Infirmary

The arrangements with the Royal Victoria and West Hants Hospital, Boscombe had apparently lapsed. In the annual Report of the County Medical Officer for 1926, however, this hospital reappears and the accommodation then available with the number of cases dealt with in the year was as follows:—

	<i>No. of Cases</i>		
Royal Hampshire County Hospital, Winchester	87
County Council Maternity Home, Winchester	74
Salisbury Infirmary	6
Royal Victoria and West Hants Hospital, Boscombe...	3
War Memorial Hospital, Andover	2
Farnham Union Infirmary	1
			<hr/> 173 <hr/>

During 1928 approach was made to other Hospitals for admission of maternity cases of a complicated nature but the only other Hospital able to offer accommodation was the Royal Berkshire Hospital, Reading. Admission of an occasional normal case to a local Maternity Home was arranged, since although the accommodation at the County Council Maternity Home had been increased from 8 to 9 beds, the accommodation was strained to capacity at times.

In 1929 the accommodation for maternity cases was reviewed in the light of the experience gained and the opinion expressed by the British Medical Association that 5 per cent. of all confinements would need to be dealt with for anticipated abnormalities. On that basis it was apparent that 22 beds would be needed for such cases and it was considered that an equal number was necessary for emergencies, making 44 in all.

At the Royal Hampshire County Hospital only 12 beds were reserved and arrangements had been made at other Hospitals for occasional cases. An agreement was arrived at with Andover War Memorial Hospital to reserve 2 beds and it was then hoped before long to obtain 4 beds at Aldershot and some accommodation in Portsmouth. In that year 102 abnormal and emergency cases were admitted under the County Council arrangements, of whom 16 were residents in the City of Winchester. In addition 124 normal cases were confined in Institutions.

Septic cases were admitted to Alton Cottage Hospital, The Royal Victoria and West Hants Hospital, Boscombe, Farnham Infirmary and the Royal Hampshire County Hospital, Winchester, to the total number of 29 cases in the year.

Difficulties had arisen in connection with the County Council Maternity Home. Apart from the limited number of beds available rendering an economical proportion of beds unable to be always occupied, other difficulties had arisen, and possibly from the overcrowding of cases and the difficulties in obtaining adequate staff, which necessitated temporary seconding of Health Visitors, several cases of puerperal sepsis had occurred.

It was considered desirable, therefore, to make other arrangements for normal cases than at the County Council Maternity Home and the conversion of a large house adjoining the Hospital proving impracticable, a temporary arrangement was concluded whereby the Hospital agreed to admit normal cases as well as abnormal with a guaranteed minimum of 78 cases per annum, thus reverting to the arrangements in force before 1929. This temporary arrangement came into force on 1st July, 1930, when the County Council Maternity Home was closed.

In 1930 arrangements for the admission of abnormal and emergency maternity cases were reviewed and the situation was as follows :—

- (1) Such cases were received under arrangements made with County Council at :—
Alton Cottage Hospital ; Andover War Memorial Hospital ;
Royal Victoria and West Hants Hospital, Boscombe ;
Farnham Infirmary ; Fleet Cottage Hospital ;
Salisbury Infirmary and Royal Hampshire County Hospital Winchester.
No special number of beds allocated except for 2 at Andover and 12 at Winchester.
A total of 102 cases were admitted in 1930.
- (2) Occasional cases admitted to Hospitals at Aldershot, Basingstoke, Gosport, Lymington, Lyndhurst, Portsmouth, Romsey and Southampton.
Accommodation for County cases in Portsmouth and Southampton strictly limited.
Aldershot were considering a maternity block.

For ' normal ' cases accommodation, apart from the County Council Maternity Home, closed 30th June, and thereafter the Royal Hampshire County Hospital, Winchester, the only beds were in Public Assistance Institutions.

In 1931 the maternity wards in the Public Assistance Institutions were surveyed and it was decided that only those where the satisfactory accommodation existed or could be provided should be used in future. These arrangements came into force on 1st October of that year, when the regular accommodation for women needing institutional confinement for domestic reasons only consisted of :—

Andover and Boscombe Hospitals
Salisbury and Farnham Infirmaries
Public Assistance Institutions at Alton, Basingstoke, Gosport, Lymington, Petersfield, Winchester and Winchester.

In May 1934 the new Maternity Block at Aldershot was open to receive complicated cases from the County, and in 1936 Portsmouth became able to give the assistance long sought for the South Eastern corner of the County.

The position then in the last pre-war year, 1938, showed that the arrangements for both difficult cases and ' normal ' cases were well distributed and of reasonable extent.

The difficult cases were dealt with chiefly at places where expert treatment could be given and where consulting obstetricians were on the Hospital staff, namely :—

Aldershot, Boscombe, Farnham, Portsmouth, Reading, Salisbury and Winchester Hospitals.

and also at Alton, Andover, Fleet, Romsey, Gosport, Havant, Lymington and Lyndhurst Hospitals.

For 'normal' cases the specially adapted wards at the following Public Assistance Institutions were used, namely :—

Alton, Basingstoke, Gosport, Lymington, Petersfield, Winchester and Winchfield, while a small number of cases were sent to Aldershot, Boscombe, Lyndhurst and Portsmouth (St. Mary's) Hospitals, and the Farnham and Salisbury General Infirmaries.

Septic cases were admitted to a special isolation block at the Royal Hampshire County Hospital, Winchester, and also to the Salisbury and Farnham Infirmaries, the Gosport War Memorial Hospital and the St. Mary's Hospital, Portsmouth.

The number of admissions had grown to—

289 'complicated' cases

299 'normal' cases

34 septic cases

In 1939 the numbers were as follows :—

312 'complicated' cases

383 'normal' cases

42 septic cases

{ 134 abnormal
178 emergency

In 1939, with the imminent outbreak of war Hampshire, in common with other 'reception areas' was asked to provide maternity accommodation for mothers from 'evacuated areas.' Expectant mothers were received from Gosport Borough, Portsmouth and Southampton County Boroughs, and from London. For use as Emergency Maternity Homes the offers of the owners of part or the whole of the following houses were accepted :—Bramshill, Shawford Park, Hawk's Lease, Lyndhurst, and Northerwood, Lyndhurst. Arrangements were entered into to take these premises over early in August but, since the authority to purchase equipment was not received until the 26th of that month, only by the strenuous efforts of the Supervisor of Midwives and the willing help of the Public Assistance Officer, were all made ready to receive women at the date of evacuation.

In addition to the above-mentioned Homes, Petersfield Rural District Council equipped and staffed part of a private house, Collyers, Steep, which was later approved for inclusion in the Emergency Maternity Homes by the Ministry of Health.

The welfare of the mothers in these Homes was supervised by the consulting Obstetricians on the staffs of Aldershot (Bramshill), Portsmouth (Petersfield) and Southampton (Shawford Park and the two homes at Lyndhurst). After confinement the women returned home against advice and further mothers discontinued to come, so that early in 1940 Bramshill was handed back to Lord Brockett and the use of Northerwood, Lyndhurst and Hawk's Lease suspended. The total confinements taking place in all Emergency Maternity Homes in 1939 was 134.

The use of Shawford Park for women from Gosport was continued and Collyers for London mothers billeted in the neighbourhood ; Portsmouth and Southampton mothers were provided for by the Ministry in Homes outside this County. In this year (1940) 207 confinements of evacuees took place in the two Homes mentioned above. A third Home was opened at Langton House, Alresford in 1941 to replace one of the Ministry's Homes in Berkshire which had taken Southampton women. Portsmouth adapted a house at Liphook and administered this for their expectant mothers. In this year 532 evacuees were dealt with in this County ; in 1942, 573 evacuees and 73 County cases ; in 1943, 644 ; in 1944, 783.

In 1945 (30th June) Shawford Park was closed, having dealt with 1,329 women with 1 maternal death. On the 31st March, 1946, the Emergency Maternity Home at Collyers was closed having admitted 973 women with 1 death, and on the 15th October, 1946, the Home at Langton House, which had admitted 1,310 women with no maternal deaths. A truly remarkable result, 3,612 women admitted to improvised maternity homes with only 2 deaths—a great credit to the staff responsible.

While providing for the care of evacuees the residents in this County had not been forgotten. On the 11th November, 1940, a house, Tregony, was opened as a maternity home in Winchester with 11 beds in lieu of the accommodation for 'normal' cases provided at the Winchester Public Assistance Institution which was needed to take septic cases since the Royal Hampshire County Hospital, Winchester, was no longer able to spare the beds for them. In addition, during this year the number of beds at Alton Public Assistance Institution was increased from 2 to 6 but the use of Gosport Public Assistance Institution discontinued owing to enemy action.

Towards the end of 1942 proposals were on foot for establishing maternity homes at Lyndhurst and Farnborough and a scheme suggested for institutional maternity services for the County presented to the Committee in October, 1943.

The scheme was based on providing beds at places other than Public Assistance Institutions, in such places as to be convenient to the mothers to be admitted, and in such numbers as to provide accommodation for 10 per cent, of the births taking place in institutions. It was later decided to try to make provision for 33 per cent. of the births. Progress has been slow for many reasons but substantial. Meanwhile the accommodation at Alton had been lost on its being taken over by the Canadians.

In 1944 Hillrise, Lyndhurst was opened with 9 beds and Courtbourn, Farnborough, later administered by Farnborough War Memorial Hospital, with 11 beds, 2 being made available to the County Council.

In 1945 (April) The Grove, Barton-on-Sea, came into operation with 14 beds; in 1946 (May) The Blake Hospital, Gosport, with 24 beds; The Grange, Liss (July) with 10 beds and The Shrubby, Basingstoke (November) with 10 beds.

In 1946, however, Tregony had to be handed back to its owner and arrangements made to admit 'normal' cases again to the Winchester Public Assistance Institution, and other arrangements made for the diminishing number of septic cases elsewhere in the same Institution.

The accommodation in January 1948 was as stated earlier but when the Regional Board took over control in July cases were being admitted to Rookwood, Eastleigh and the Royal Hants County Hospital beds were fully occupied. There were, therefore, 111 beds available for 'normal' cases.

The following table shows the yearly number of births, live and still combined, together with the number of women admitted for institutional confinement under County Council arrangements for abnormality and emergency ('complicated' cases) or because of unsatisfactory housing conditions ('normal' cases). The maternal mortality rate is added in the last column. Women admitted from evacuated areas are not included. This table shows the slight reduction in mortality owing to greater institutionalisation the reduction such as it has been, is in large measure due to the more efficient treatment of sepsis. The reduction in 1944 and 1945 is probably connected with the increased birth rate.

Year	Total Births (Live and Still)	No. complicated cases	% of Births	No. normal cases	% of Births	Total admissions	% of Births	Maternal Mortality (total births)
1929	7906	108	1.4	91	1.1	199	2.5	3.54
1930	7900	102	1.3	77	1.0	179	2.3	3.67
1931	7954	86	1.1	99	1.2	185	2.3	2.77
1932	7862	116	1.5	220	2.8	336	4.3	5.34
1933	7444	137	1.8	236	3.2	373	5.0	4.84
1934	7598	153	2.0	257	3.4	410	5.4	4.61
1935	7683	172	2.2	218	2.8	390	5.0	5.08
1936	7845	205	2.6	281	3.6	486	6.2	4.46
1937	8215	261	3.2	300	3.6	561	6.8	3.53
1938	8364	289	3.5	299	3.6	588	7.1	2.87
1939	8833	312	3.5	383	4.3	695	7.8	2.96
1940	8999	319	3.5	419	4.7	738	8.2	2.14
1941	9995	312	3.1	358	3.5	670	6.7	3.26
1942	9983	456	4.6	511	5.1	967	9.7	2.30
1943	9780	501	5.1	470	4.8	971	9.9	2.45
1944	10836	579	5.3	602	5.5	1181	10.8	1.84
1945	10059	549	5.5	808	8.0	1357	13.5	1.39
1946	11466	688	6.0	858	7.5	1496	13.5	2.09
1947	12229	726	5.9	955	7.8	1681	13.7	1.31

TREATMENT OF DEFECTS.

The same facilities are provided for the treatment of children under the age of five as for school children. Minor Ailment Clinics are available and treatment of defects of teeth and eyes is arranged. The orthopaedic arrangements include children of all ages, and so do those for operative treatment of tonsils and adenoids.

The County Council, with the approval of the Ministry of Health, decided that the treatment of children under five provided by the Council should be free, so as to bring it into line with treatment provided for school children.

Dental.

Children under Five Years :				
Number treated	...	...	...	485
Number of teeth filled	...	...	...	244
Number of teeth extracted	...	...	...	394

Ear, Nose and Throat Treatment.

	Age	1	2	3	4	Total
Tonsils and Adenoids only		3	20	71	84	178
Mastoid		—	1	3	—	4
Mastoid and Myringotomy		—	—	1	1	2
Mastoid and Ts. and As.		—	1	—	—	1
Myringotomy		—	2	1	4	7
Myringotomy and Ts. and As.		—	—	—	1	1
Otitis Media		1	1	2	5	9
Otitis Media and Ts. and As.		—	—	—	1	1
<i>Nasal Conditions</i>						
Investigation and non-operative treatment.		—	—	1	—	1
<i>Ear Conditions.</i>						
Antrostomy		—	—	—	1	1
Investigation and non-operative treatment		1	—	—	—	1
Investigation of Deafness		—	—	1	2	3
Other E.N.T. Conditions		—	—	—	1	1
					Total	210

Orthopaedic Defects.

The following table shows the work done in the Clinics and in the Treloar Hospital for children under school age :—

CLINICS													HOSPITALS						
Defect Group No.	DEFECT	Total No. attending Dec. 31st, 1946	Awaiting Hospital Treatment	Under Clinic Supervision only	New cases admitted to Register during 1947	Recommended Hospital Treatment	Recommended Clinic Supervision only	No Treatment Required	DISCHARGED				Total No. on Books, Dec. 31st, 1947	No. in Hospital Dec. 31st, 1946	New Cases Admitted 1947	DISCHARGED			No. in Hospital Dec. 31st, 1947
									Cured	Improved	Needing no Treatment	Owing to School age or Left County or Died or Refused Treatment				Cured	To Attend Clinic	Needing no Treatment	
1	CONGENITAL DEFORMITIES :—																		
2	Torticollis	19	—	19	19	—	15	4	—	9	4	3	22	1	1	—	2	—	—
3	Spinal Malformations	8	—	8	1	—	—	1	—	—	1	3	5	—	—	—	—	—	—
4	Dislocation of Hip... ..	5	1	4	7	3	3	1	—	—	1	1	10	5	4	—	3	—	6
5	Talipes equino varus	54	1	53	33	2	26	2	—	6	2	11	65	5	2	—	7	—	5
6	Other	90	27	63	22	9	12	1	—	11	1	23	77	3	32	—	30	—	—
7	INFLAMMATORY CONDITIONS :—																		
8	Osteomyelitis	—	—	—	1	1	—	—	—	—	—	—	1	—	—	—	—	—	—
9	Suppurative arthritis	—	—	—	2	—	2	—	—	—	—	—	2	—	—	—	—	—	—
10	Rheumatoid arthritis	1	—	1	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1
11	Other	3	—	3	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—
12	TRAUMATIC CONDITIONS :—																		
13	Fracture	1	—	1	1	—	1	—	—	—	—	—	2	—	2	—	1	—	1
14	Dislocation	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	Injury to soft tissues	1	—	1	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—
16	Other	5	—	5	5	1	3	1	—	—	1	—	9	1	—	—	1	—	—
17	PARALYSIS :—																		
18	Anterior poliomyelitis	8	2	6	11	2	9	—	—	3	—	3	13	1	17	—	3	—	15
19	Polioccephalitis	—	—	—	—	—	—	—	—	—	—	2	23	—	1	—	1	—	—
20	Spastic paralysis	20	—	20	5	—	5	—	—	—	—	—	—	—	—	—	—	—	—
21	Muscular dystrophy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
22	Obstetrical paralysis	3	—	3	1	—	1	—	—	—	—	1	3	—	—	—	—	—	—
23	Other	4	—	4	1	—	1	—	—	1	—	—	4	—	—	—	—	—	—
24	ACQUIRED DEFORMITIES :—																		
25	Kyphosis	6	—	6	2	—	1	1	—	—	1	3	4	—	—	—	—	—	—
26	Scoliosis	1	—	1	2	—	2	—	—	—	—	—	3	1	—	—	—	—	—
27	Genu valgum	85	1	84	79	—	76	3	—	11	3	50	100	—	4	—	4	—	1
28	Bowed tibiae	41	—	41	33	—	29	4	—	18	4	7	45	—	—	—	—	—	—
29	Pes Planus	51	—	51	32	—	28	4	—	8	4	15	56	—	—	—	—	—	—
30	Pes cavus	3	—	3	12	—	10	2	—	1	2	1	11	—	—	—	—	—	—
31	Hallux valgus and Hammer Toes	7	—	7	6	—	5	1	—	2	1	1	9	—	—	—	—	—	—
32	Other defects	10	1	9	10	1	7	2	—	2	2	2	14	—	—	—	—	—	—
33	DISEASES OF BONE :—																		
34	Neoplasms	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
35	Dystrophies of bone	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
36	Other Defects	19	—	19	10	—	7	3	1	7	3	2	16	1	4	—	3	—	2
37	TOTALS	445	83	412	292	19	243	30	1	79	30	133	494	18	68	—	55	—	81

Cleft Lips and Palates.

Admissions to the Lord Mayor Treloar Cripples Hospital, Alton, have fallen—due unfortunately to the need for increasing the number of beds for cases of anterior poliomyelitis; the waiting list for lip and palate cases at the end of December, 1947, was 27 as against 14 in the preceding year. Ascertainment continues to be satisfactory, and references from general practitioners continue to be good.

<i>HOSPITAL TREATMENT—1947.</i>					
<i>Diagnosis</i>	<i>Group No</i>	<i>In Hospital</i> 31.12.46	<i>Admitted</i> 1947	<i>Discharged</i> 1947	<i>In Hospital</i> 31.12.47
<i>Cleft lips</i>	1	—	3	2	1
	2	—	—	—	—
	3	—	1	1	—
<i>Cleft palate</i>	1	—	—	—	—
	2	—	2	—	2
<i>Combination of Groups</i>	1	—	—	—	—
	2	—	1	1	—
	3	2	7	9	—
Total	—	2	14	13	3

The classifications mentioned above are as follows :—

Group 1 cases :—these are pre-alveolar clefts and are operated on after weaning—9 month.

Group 2 cases :—these are post-alveolar clefts and are repaired before speech is attempted at about the age of one year.

Group 3 cases :—in these, the alveolar arch is cleft as well as the lip; the aim is to repair the lip as soon as the child is thriving, if possible, at the age of 6—8 weeks.

Cases known to the Department at present are :—

<i>Year of birth</i>	Pre-1939	1939	1940	1941	1942	1943	1944	1945	1946	1947
<i>No. of Cases</i>	25	10	11	4	10	12	10	7	18	11

Orthoptic Treatment.

County Orthoptic Clinics were commenced at Alton, Andover and Winchester in April, 1946, and at Basingstoke in June, 1947. Miss E. Hall, who was appointed part-time County Orthoptist in 1946, resigned at the end of July, 1947, and Miss M. E. Sharland was appointed full-time in October, 1947.

During the year, 7 children under school-age were recommended by the County Oculist for orthoptic treatment. Five cases were referred to the nearest Hospital with an Orthoptic Clinic and two cases to the County Orthoptist (one case, 4 years, with left convergent concomitant squint with left amblyopia and one case, 3 years, with alternating strabismus).

Including cases referred in 1946, a total of 6 children under school-age attended the County Orthoptic Clinics during 1947 and the treatment given was as follows :—

Total occlusion right eye	1
Total occlusion right eye followed by practice of ocular movements at home ...	1
For orthoptic training later when older...	2
Under observation	2

PREVALENCE AND CONTROL OVER INFECTIOUS DISEASES.

The following tables summarise the quarterly returns of notification received during the year of infectious diseases occurring among civilians who were, at the time of diagnosis, residing in the Administrative County. These quarterly returns have been corrected as required as a result of withdrawal of notifications by practitioners following revision of diagnosis.

NOTIFICATIONS OF INFECTIOUS DISEASE, 1947.
RURAL DISTRICTS

District	Estimated Population for Mid. 1947	CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1947																			Total Cases		
		Small Pox	Scarlet Fever	Diphtheria (including Membranous Croup)	Enteric and Paratyphoid Fever	Pneumonia	Cholera	Plague	Puerperal Pyrexia	Puerperal Fever	Cerebro-Spinal Fever	Acute Polio-myelitis	Acute Polio- encephalitis	Encephalitis Lethargica	Dysentery	Ophthalmia Neonatorum	Erysipelas	Pulmonary Tuberculosis	Other Tuberculosis	Malaria		Measles (exclud. German Measles)	Whooping Cough
ALTON	18'00	—	9	—	—	9	—	—	3	—	—	6	—	—	—	—	2	12	3	—	31	54	129
ANDOVER	11'680	—	8	—	—	2	—	—	—	1	3	—	—	—	—	—	1	8	3	—	95	43	164
BASINGSTOKE	15'570	—	8	1	—	7	—	—	—	—	—	—	—	—	—	—	2	5	5	—	58	7	93
DROXFORD	18'160	—	7	—	—	5	—	—	1	—	1	1	—	—	—	—	1	8	4	—	61	40	129
HARTLEY WINTNEY	16'980	—	10	1	—	5	—	—	1	—	1	—	—	1	1	1	3	13	7	—	425	38	603
KINGSCLERE AND WHITCHURCH	16'290	—	4	1	1	17	—	—	2	—	—	—	1	—	1	1	2	9	1	—	35	11	86
NEW FOREST	40'070	—	7	2	—	11	—	—	5	—	—	14	—	—	—	3	3	38	5	—	449	32	669
PETERSFIELD	17'690	—	26	1	4	5	—	—	—	—	—	—	—	—	—	—	2	11	3	—	144	13	209
RINGWOOD AND FORDINGBRIDGE	21'360	—	10	2	—	16	—	—	1	—	—	12	—	—	—	—	3	9	4	—	114	30	201
ROMSEY AND STOCKBRIDGE	23'000	—	9	3	—	9	—	—	2	—	—	4	—	—	—	—	3	7	2	—	153	51	243
WINCHESTER	3'500	—	27	—	—	18	—	—	1	—	1	9	1	—	—	3	6	26	4	—	447	49	592
TOTAL	237'400	—	125	11	5	104	—	—	16	—	4	49	2	—	2	8	28	146	41	—	2012	368	2921

The following table compares the incidence in 1947 in Rural and Urban Districts with that in 1946 :—

	Year	Scarlet Fever	Diphtheria	Enteric and Para-Typhoid	Pneumonia	Puerperal Pyrexia	Cerebro-spinal Fever	Acute Poliomyelitis	Polio-encephalitis	Dysentery	Ophthalmia Neonatorum	Erysipelas	Pulmonary Tuberculosis	Other Tuberculosis	Malaria	Measles	Whooping Cough
Rural Districts ...	1946	209	12	1	126	17	9	4	—	12	16	41	158	38	1	390	404
	1947	125	11	5	104	16	4	49	2	2	8	28	146	41	—	2012	368
Urban Districts ...	1946	318	43	1	151	25	8	1	—	2	26	59	270	63	4	1037	638
	1947	251	12	16	168	29	12	46	4	2	21	51	333	43	—	2924	667
TOTALS ...	1946	527	55	2	277	42	17	5	—	14	42	100	428	101	5	1427	1042
	1947	376	23	6	272	45	16	95	6	4	29	79	479	84	—	4936	1032

Deaths occurring from notifiable infectious diseases during 1947 were as follows, as allocated by the Registrar General to this County :—

Typhoid and Para-typhoid	...	...	...	...	—
Cerebro-spinal Fever	...	...	...	...	6
Scarlet Fever	...	...	...	...	—
Whooping Cough	...	...	...	...	6
Diphtheria	...	...	...	...	3
Tuberculosis of respiratory system	...	...	...	...	192
Other forms of Tuberculosis	...	...	...	...	27
Measles	...	...	...	...	3
Acute polio-myelitis and polio-encephalitis	...	...	...	...	8

Diphtheria.

One death is recorded in the age group 5—10 year ; this child had not been immunised.

The following table shows the age distribution of notifications of diphtheria:—

Age Group	1947	1946	1945	1944	1943	1942
0— ...	—	1	—	1	—	1
1— ...	2	4	2	3	4	3
3— ...	4	9	2	2	9	4
5— ...	3	12	15	14	26	11
10—16 ...	3	13	5	5	14	4
Over 16 ...	11	16	18	31	24	30
Unknown ...	—	—	7	—	—	—
TOTAL ...	23	55	49	56	77	53

Diphtheria Immunisation.

The following Table shows the number of children (0—5 and 5—15 years of age) who had been given two injections of A.P.T. prophylactic or three of T.A.F. by the end of the year in each District in the County, together with the estimated proportion of each age group who had, at the end of the year, been so treated. Immunisation is relative and whether a child develops an attack of diphtheria when exposed to infection after prophylactic treatment, will depend on the intensity of the infection to which it is exposed and the degree of resistance the child can offer ; this latter is almost always sufficiently raised by the treatment that the disease, if acquired, is not fatal and within a reasonable period, sufficient to completely avoid any illness. There are always some children, a very small minority, whose resistance it is very difficult to raise.

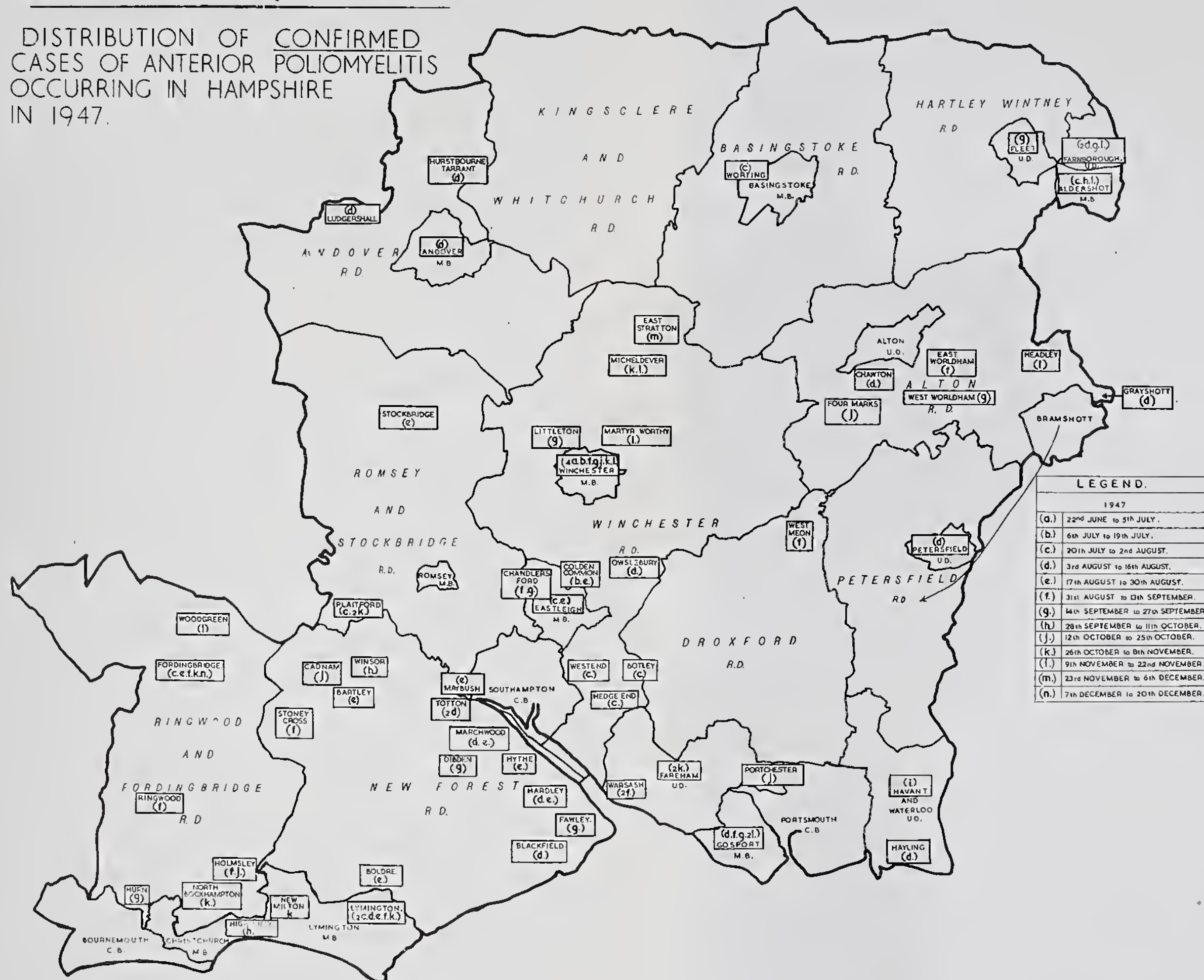
	URBAN DISTRICTS												RURAL DISTRICTS													
	Aldershot	Alton	Andover	Basingstoke	Christchurch	Eastleigh	Fareham	Farnborough	Fleet	Gosport	Havant and Waterlo	Lymington	Petersfield	Romsey	Winchester	Alton	Andover	Basingstoke	Droxford	Hartley Winney	Kingsclere and Whitechurch	New Forest	Petersfield	Ringwood and Fordingbridge	Romsey and Stockbridge	Winchester
Number born in years stated fully immunised by 31.12.46	6 212 248 327 301	— 61 53 72 72	127 184 172 146 240	57 150 128 192 226	4 134 152 150 123	4 233 290 300 292	12 359 397 482 410	1 100 124 145 150	1 70 62 88 105	44 460 466 488 446	41 229 311 293 272	14 143 150 225 274	4 48 54 57 75	58 73 78 87 64	8 231 214 281 258	3 112 1143 274	150 73 141 148 274	10 120 194 103 149	2 134 1289	14 100 155 136 140	155 181 238 166 290	36 47 458 440 480	20 89 85 149 96	5 121 158 215 239	140 265 260 237 256	55 328 348 449 498
Total estimated population born 1943—1947 as at mid-1947 ...	2489	824	1445	1316	1223	2320	3680	1861	710	5340	2540	1540	543	581	2110	1856	1275	1274	1610	1520	1310	3540	1417	1760	2029	3100
Percentage fully immunised by 31.12.47	43.5	31.3	60.1	60.2	44.4	48.2	45.1	28.0	46.0	35.6	45.0	51.0	43.8	63.3	42.2	67.7	63.1	46.0	83.5	35.8	78.6	52.7	30.9	41.8	57.0	54.1
Number born in stated periods fully immunised by 31.12.4	786	220	1292	937	737	1250	2500	563	609	2224	1638	1334	315	435	1571	2850	668	198	2022	311	1142	2159	1065	1364	1150	2782
1933 to 1937	493	196	1293	594	817	1308	2634	671	520	2077	1473	1136	234	405	1499	2850	224	52	2022	203	1117	1960	1267	1005	929	2278
Total estimated population born in 193-1942 ...	3942	1515	1598	2123	2027	3910	5900	2948	1150	7570	4140	2550	919	955	3519	2965	172	2057	2620	2500	2252	5810	2401	2810	3335	5171
Percentage fully immunised by 31.12.47	32.4	31.6	100.0	72.1	76.6	65.4	87.0	41.8	98.0	56.8	75.0	95.8	59.7	8.80	87.2	96.1	51.8	12.1	77.1	21.6	100.0	70.9	97.1	64.3	62.3	97.8
Percentage of all born 1933-194 fully immunised by 31.12.47 ...	36.9	31.5	100.0	67.5	64.5	59.0	70.9	36.5	78.2	48.1	63.7	79.6	85.6	78.1	72.1	85.2	56.5	25.1	81.5	26.3	92.3	64.0	72.5	68.0	60.3	81.4

Percentage of Children Immunised in County Area at December 31st, 1947 :—

Age Group	Urban	Rural	County
—5	45.8	55.8	49.6
5—15	77.9	71.4	75.4
Both Groups	64.8	66.9	65.6

HAMPSHIRE COUNTY COUNCIL

DISTRIBUTION OF CONFIRMED
CASES OF ANTERIOR POLIOMYELITIS
OCCURRING IN HAMPSHIRE
IN 1947.



During 1947, 1 case of 15 years of age and 2 cases under the age of 15 were notified as suffering from diphtheria who were reported to have had prophylactic treatment. As in previous years enquiries were made concerning the previous immunisation, the character of the illness and its results in every case of diphtheria notified in the County. Details of these are shown in the table below.

1947 Notified during week ended	Local Sanitary Authority	Case	Age	Prophylactic used	Notes from Isolation Hospital, etc.
(1) 4th Jan.	New Forest R.	B.M.	15	Two doses T.A.F. 1946	A mild faucial case of diphtheria
(2) 20th Sept.	Havant and Waterloo U.	E.W.	6½	A.P.T. 0.2 c.c. 21.7.42 A.P.T. 0.5 c.c. 18.8.42	A case of faucial diphtheria
(3) 29th Nov.	Christchurch Borough	L.B.	3	A.P.T. 0.2 c.c. 3.12.45 A.P.T. 0.5 c.c. 4.1.46	A mild case of diphtheria

Ophthalmia Neonatorum.

In 1947, 29 cases were notified. From these 17 smears were received in the County Laboratory and in four organisms resembling gonococci were seen. Of the 29 cases, six were admitted to Hospital for treatment, one to Salisbury Infirmary, four to the Portsmouth Infectious Diseases Hospital, and one to the Free Eye Hospital, Southampton. In only one case was there impairment of vision.

Anterior Poliomyelitis.

The following Table shows the District Case Incidence by Age and Sex of Cases occurring since the last week of June, 1947.

The following Urban Districts had no cases notified:—Alton and Romsey.

The following Rural Districts had no cases notified:—Basingstoke, Hartley Wintney and Kingsclere and Whitchurch.

The incidence, according to age and sex, was as follows:—

URBAN DISTRICTS					RURAL DISTRICTS				
District	No.	Males Ages	No.	Females Ages	District	No.	Males Ages	No.	Females Ages
Aldershot	2	3, 16	1	25	Alton	4	10 mths, 11 mths, 8, 10	2	4 mths, 2
Andover	1	4	—	—	Andover	2	3, 41	—	—
Basingstoke	1	4	—	—	Droxford	1	7	—	—
Christchurch... ..	2	8 mths, 25	1	2	New Forest	8	5, 6, 10, 10, 10, 15, 20, 21	7	5, 8, 15, 16, 21, 31, 37
Eastleigh	4	13, 17, 22, 26	—	—	Ringwood & Fording- bridge	4	7, 10, 13, 28	5	1, 3, 3, 8, 36
Fareham	2	5, 11	3	1, 1, 5	Romsey & Stockbridge	1	9	3	16, 18, 24
Farnborough	1	14	3	8, 28, 43	Winchester	6	5, 7, 15, 18, 39, 64	4	3, 7, 22, 26
Fleet	1	15	—	—					
Gosport	2	2, 2	3	3 mths, 13, 18					
Havant & W'loo ...	2	11, 42	—	—					
Lymington	2	7, 38	4	1, 4, 11, 28					
Petersfield	—	—	1	10					
Winchester	7	9, 14, 14, 14, 14, 15, 15	3	17, 28, 37					
TOTAL	27		19		TOTAL	26		21	

Of the above cases eight were subsequently not confirmed.

Taking the County as a whole, there were five cases under 1 year, 16 between 1 and 5 years, 34 between 5 and 15 years, and 38 who were 15 years old and over, making a grand total of 93.

The Registrar-General's figures for the population of the Urban Districts (mid-1947) were 316,530, and for the Rural Districts 237,400, which gives an incidence of 14.5 per 100,000 in the Urban Districts and 19.8 per 100,000 in the Rural Districts.

The following comments may be made on the after effects of the infection. The age 17 has been taken as the dividing line for these comments, since up to that age cases can be admitted to the Lord Mayor Treloar Hospital, Alton, where arrangements were made to allow admission of any case in need. Recently, the age limit for females was temporarily raised to 20 years. Twenty nine cases were notified aged 17 years and over, of whom three died, aged 25, 37 and 42 years. Six are still in need of institutional treatment at the end of 1947 (one male, aged 28, and five females, aged 18, 18, 22, 24, and 31). Six were still in need of some treatment, but not institutional (one male aged 28 and five females aged 25, 28, 28, 37 and 43). Fourteen had completely recovered (10 males aged 17, 18, 20, 21, 22, 26, 38, 39, 41 and 64—four females, aged 19, 21, 26 and 37).

Of the five cases under one year of age when the disease attacked them all are still in hospital undergoing treatment.

Of the 16 between one and five years of age at date of onset, 3 are completely cured, 4 are still under treatment as out-patients and 7 are still inpatients in hospital. Two cases have left the County and their condition is unknown.

Of the 34 between 5 and 15 years of age at date of onset, 16 are completely cured, 12 do not need institutional treatment, but are not cured, and six are still in-patients in hospital. One child died.

Of the 9 who were between 15 and 17 years of age at onset, five were completely cured, one is receiving treatment as an out-patient and three are still in hospital.

It is too soon to say how many of those attacked will be severely crippled that special educational treatment will be required or how many will have to be registered as Disabled Persons needing specialised training or re-training to become self-supporting or how many will be so physically handicapped that they should be regarded as totally disabled. It is hoped to review the position in another twelve months.

The outbreak of anterior poliomyelitis may be said to have invaded this County at the end of June when four boys in residence at Winchester College fell sick. Throughout July, August September and October incidence remained high, and even in December one case occurred.

According to the presumed dates of onset of those in which this information may be regarded as more or less reliable the incidence was as shewn in the following table :—

<i>Fortnight beginning.</i>	<i>No. of Cases</i>
July. 20	10
Aug. 3	17
17	11
31	12
Sept. 14	10
28	3
Oct. 12	5
26	8
Nov. 9	7
23	1
Dec. 7	1

I am indebted to the Medical Superintendent of the Lord Mayor Treloar's Hospital, Alton, for the following observations on the character of the cases occurring in this County :—

Onset

Large number of cases gave typical history and symptomology going through Stage A and Stage B, phases 1, 2, 3. But others have no history of the prodromal illness, Stage A, or Stage B, the stage of onset. Paralysis or weakness, particularly of the legs, being noticed after trivial incidents, such as falling off a chair or gate, or tripping while walking.

Deaths

Two deaths within a few hours to 48 hours of admission due to polio-encephalitis. One, a baby at 10 months, had the complication of Epiloia, areas of cortical sclerosis being found at post mortem. This accounts for the history of convulsions given in this case.

Lumbar Puncture

This was not done as a routine, but usually to relieve headaches. C.S.F. often found to contain a preponderance of polymorphs over lymphocytes, one case having a count of over 300.

Treatment.

Physio-therapy was started as soon as possible, passive movements of all joints daily as soon as this could be done without pain. Active movements being begun as early as possible. No electrical stimulation of muscle being employed. This was found to retard rather than help so far as children are concerned. Children admitted here from other hospitals where electrical stimulation had been used were found to be unco-operative and frightened, it taking a considerable period to regain their confidence.

Value of hydro-therapy was very considerable, producing rapid improvement in function once the child finds that a limb thought to be paralysed is actually seen to be moving in water.

Splinting.

Cases with weakness or paralysis of erector spinae groups and abdominals nursed on flat mattresses. Plaster beds are liable to produce stiffness, particularly of the back.

Shoulders.

Abduction splints often gave rise to contraction of trapezius muscles. These cases nursed with arm lying at about 60° between sandbags.

Lower Extremities.

Short tin shoes below the knee, with cross bar to prevent rotation.

Other Remarks.

Two cases had special features. Both were young girls, one aged 20 and the other 15. In both cases there was a flaccid paralysis of both the lower limbs. After a period of treatment with very little recovery, it was found that all muscle groups in the limbs responded to faradism; the younger girl was discharged with a complete recovery. The second is still under treatment.

Distribution of confirmed cases in the County Area are shown on the map included in this report.

FOOD POISONING.

The following outbreaks of food poisoning occurred in this County in 1947 :—

24th April, 1947—Aldershot.

Sixty people contracted Salm. typhi murium infection through eating ice cream from an Aldershot Cafe.

Salm. typhi murium type 2b isolated from 60 customers, from the ice cream and from the stools of several Assistants in the Cafe including the man who made the ice cream.

May, 1947—Basingstoke.

Salm. montevideo isolated from the stools of four people present at a party at Basingstoke.

Cause of infection not known, but meat pie is suspected.

7th June, 1947—Sarisbury.

Mild attacks of diarrhoea and vomiting in nine persons who had eaten a meal of shrimps, probably insufficiently cooked. No bacteriological investigation undertaken.

12th July, 1947—Twyford.

Lunch party at Twyford.

Salm. typhi murium type 2a isolated from the blanc-mange (made from ducks' eggs) and from the stools of all the sixteen persons who attended the lunch, also from certain members of the domestic staff including the cook and kitchen-maid.

3rd August, 1947—Aldershot.

Party of eight developed symptoms of food poisoning after eating Yorkshire Pudding containing dried egg.

Six of these developed symptoms but from all eight people and from the egg whisk jar in which egg was reconstituted, Salm. oranienburg was isolated.

5th September, 1947—Chandlersford.

Extensive but mild outbreak of food poisoning believed to have been associated with mid-day dinner supplied to schools by canteen at Chandlersford. No cause found.

TUBERCULOSIS.*Death Rates.*

The death rate in the Administrative County from all forms of tuberculosis during the year 1947 was .40, the same as in 1946. An increase in the death rate from pulmonary tuberculosis from .33 to .35 was offset by a reduction in respect of non-pulmonary tuberculosis from .07 to .05. The number of pulmonary deaths increased from 177 in 1946 to 192 in 1947 but there was a fall from 39 to 27 in deaths from non-pulmonary tuberculosis.

In tables A. and B. the death rates from tuberculosis are compared with those for England and Wales and the figures for recent years are given for comparison.

Table A.*Death Rates from Pulmonary Tuberculosis.*

Year	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
No. of Deaths	198	178	207	220	207	188	214	200	177	192
County ... ..	.38	.33	.40	.40	.39	.36	.41	.39	.33	.35
England and Wales ...	.53	.54	.59	.60	.54	.56	.54	.52	.46	.47

Table B.*Death Rates from Non-Pulmonary Tuberculosis.*

Year	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947
No. of Deaths	46	38	37	64	52	43	38	42	39	27
County ... ..	.09	.07	.07	.12	.10	.08	.07	.08	.07	.05
England and Wales ...	.10	.099	.11	.13	.11	.11	.115	.10	.08	.08

A graph showing the death rates from pulmonary tuberculosis in the Administrative County from 1941 to 1947 is given on page 52.

Notifications.

The number of primary notifications issued during 1947 shows an increase of 51 pulmonary cases and a decrease of 17 in the non-pulmonary cases ; a net increase of 34 for all forms of disease. The decrease in the non-pulmonary notifications is reflected in the number of deaths. The considerable increase in the number of pulmonary notifications is due in the main to greatly increased use of radiography and many cases are now notified on radiological evidence alone while the patient remains symptomless. It was during the year under review, 1947, that large areas of the County were for the first time surveyed by Mass Radiography.

Table C (Pulmonary).

Year	1943	1944	1945	1946	1947
Total Notifications	369	395	431	428	479
No. of Males	239	249	271	263	300
No. of Females	130	146	160	165	179

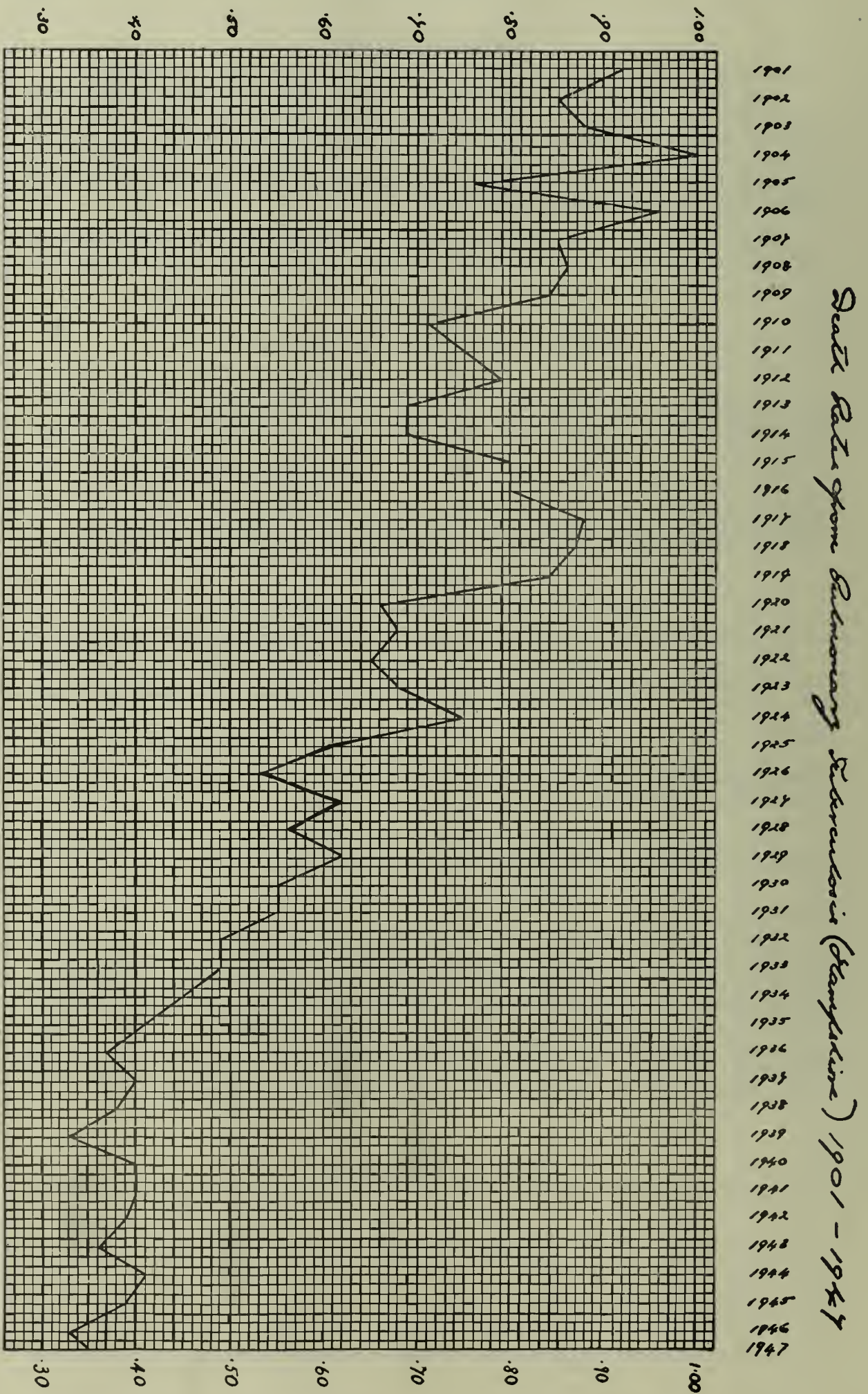


Table C (Non-Pulmonary).

Year	1943	1944	1945	1946	1947
Total Notifications	123	109	101	101	84
Notifications—Male	62	54	51	51	46
Notifications—Female	61	55	50	50	38

Clinic Work.

The figures shown in Table D indicate the great increase in Clinic attendances during the past 5 years. There has been an increase of 63% in attendances since 1943 and this work has thrown a considerable strain on the Tuberculosis Staff.

Artificial pneumothorax refills demand most of the afternoon during all day sessions which are held at the busiest Clinic. Some readjustment to lessen the pressure on Tuberculosis Officers will be necessary in the immediate future.

Table D.

	1943	1944	1945	1946	1947
Aldershot	1176	1210	1259	1289	1660
Andover	663	673	593	652	746
Basingstoke	549	650	745	672	1020
Christchurch	661	601	646	850	1244
Eastleigh	826	1038	1183	1191	1425
Fareham	1149	1526	1766	1630	2040
Fordingbridge	107	124	119	116	123
Gosport	976	1169	1346	1571	2162
Havant	935	1115	1283	1203	1220
Totton	618	834	887	1055	1263
Winchester	401	588	612	653	825
The Mount Sanatorium Refill Clinic	763	919	1024	990	987
Chandlersford Sanatorium Refill Clinic	290	240	200	190	230
	9114	10687	11663	12062	14945

Table E. below is a copy of the return sent to the Ministry of Health showing the work of the Clinics during the year under review and the figures for 1946 are presented for comparison. It will be noted that the number of new cases diagnosed during the year shows a satisfactory increase in those classified T.B. minus, i.e. discovered before tubercle bacilli are present in the sputum; this figure having risen from 187 to 243, while those classified T.B. plus have increased from 174 to 191.

The number of notifications of non-pulmonary cases mentioned earlier on account of the decline during the year is followed, as one would expect, by a reduction in the number of new non-pulmonary cases on the register. It is satisfactory to note that the number of cases removed from the register as recovered, although small, is 56 compared with 23 during the previous year.

Table E.
1947.

DIAGNOSIS	PULMONARY				NON-PULMONARY				TOTAL				GRAND TOTAL
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—Number of definite cases on Register at beginning of Year	*972	594	15	6	113	109	94	98	1085	703	109	104	2001
(2) Transfers from other Authorities during year	70	80	—	1	6	6	2	2	76	86	2	3	167
(3) Lost sight of cases returned during the year	7	6	—	—	1	—	—	—	8	6	—	—	14
B.—Number of NEW CASES diagnosed as tuberculous during Year :													
(1) Class T.B. Minus	123	103	9	8	—	—	—	—	123	103	9	8	243
(2) Class T.B. Plus	126	62	1	2	—	—	—	—	126	62	1	2	191
(3) Non-pulmonary	—	—	—	—	17	7	24	21	17	7	24	21	69
C.—Number of cases included in A and B written off Register during Year as :—													
(1) Recovered	14	12	1	—	5	6	6	12	19	18	7	12	56
(2) Dead (all causes)	101	55	1	—	1	3	1	2	102	58	2	2	164
(3) Removed to other Areas	75	89	2	—	4	6	9	5	79	95	11	5	190
(4) For other reasons	47	39	3	2	10	10	12	7	57	49	15	9	130
D.—Number of definite cases of Tuberculosis on the Dispensary Register at the end of the year	1061	650	18	15	117	97	92	95	1178	747	110	110	2145

* Number of cases on register at beginning of year showed variations in respect of children and adults as compared with end of previous year on account of transfer of children to adult groups on attaining the age of 15 years.

Number of T.B. positive cases on Clinic register 31st December, 1947—1044.

Table E.
1946.

DIAGNOSIS	PULMONARY				NON-PULMONARY				TOTAL				GRAND TOTAL
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—Number of definite cases on Register at beginning of Year	856	541	18	5	92	90	98	101	948	631	116	106	1801
(2) Transfers from other Authorities during year	62	71	2	2	3	5	4	4	65	76	6	6	153
(3) Lost sight of cases returned during the year	7	5	—	—	—	—	—	—	7	5	—	—	12
B.—Number of NEW CASES diagnosed as tuberculosis during Year :													
(1) Class T.B. Minus	112	66	4	5	—	—	—	—	112	66	4	5	187
(2) Class T.B. Plus	116	58	—	—	—	—	—	—	116	58	—	—	174
(3) Non-pulmonary	—	—	—	—	15	18	29	25	15	18	29	25	87
C.—Number of cases included in A and B written off Register during Year as :—													
(1) Recovered	3	2	1	—	3	2	4	8	6	4	5	8	23
(2) Dead (all causes)	85	61	—	—	3	4	—	—	88	65	—	—	153
(3) Removed to other Areas	58	71	4	—	2	6	10	3	60	77	14	3	154
(4) For other reasons	38	18	1	1	5	5	7	8	43	23	8	9	83
D.—Number of definite cases of Tuberculosis on the Dispensary Register at the end of the year	969	589	18	11	97	96	110	111	1066	685	128	122	2001

Number of T.B. Plus cases on Dispensary Register, December 31st, 1946—966

It may be noted that the number of new cases diagnosed during the year shewed a large increase in the T.B. minus class, i.e. those who have no sputum, or a little sputum free from tubercle bacilli; this figure having risen from 187 to 243 against a smaller increase in the number of new cases classified T.B. plus, from 174 to 191. This is to be expected as the result of intensified search for early cases by Radiography and other measures as these discover many symptomless and early cases, and fewer unrecognised open cases.

However, this observation on the increased ascertainment will hold good for a limited period only; for other things being equal, the recognition in advance of early cases should lead to a more than corresponding reduction in patients arising during subsequent years.

The number of patients on the Dispensary Register who at any time have been found to yield sputum containing tubercle bacilli has again increased. A review of these "T.B. plus" cases in past years is set out below:—

1932	...	...	467	1940	...	...	664
1933	...	...	470	1941	...	...	713
1934	...	...	521	1942	...	...	751
1935	...	...	497	1943	...	...	816
1936	...	...	540	1944	...	...	838
1937	...	...	546	1945	...	...	899
1938	...	...	596	1946	...	...	966
1939	...	...	618	1947	...	...	1044

and these figures give food for thought.

There is no doubt that the expectation of life of a person suffering from Pulmonary Tuberculosis has been increased by improved methods of treatment and by extended after care and maintenance grants. These factors raise the number of "T.B. plus" on the register, and a material proportion of the class improve so that they cease to produce bacilli in the sputum. But the possibility that the continued rise may be connected with a rise in the incidence of Tuberculosis in the Country is always to be borne in mind.

The present position as regards Tuberculosis must be regarded with caution. It is an axiom that poor environmental conditions encourage the spread of this infection. For most of the Nation, food has for some time been less generous, housing and some other conditions less good than before the war, and a halt in the falling death rate pictured in the graph on page 52 during the years between wars was only to be expected, while a reversal of the reduction would not be surprising.

X-ray Examinations.

The number of X-ray films taken of out-patients under the County Tuberculosis Scheme has doubled since 1944. The number taken in that year was 1,655 compared with 3,565 in 1947. The arrangements for radiological examinations worked very smoothly and as the majority of hospitals provide a satisfactory film of the chest it is not necessary for patients to travel very long distances as a general rule.

The radiographer, Mr. E. Knight, attends The Mount Sanatorium, Bishopstoke, once a week for an out-patient radiological session and the greatest possible use is made of the apparatus at that institution. A new and more powerful 4 valve X-ray Apparatus has been installed at The Mount Sanatorium in place of the original one valve set, so that films of the highest quality shall be available.

Residential Treatment.

Table F.
Beds occupied, 31st December, 1947

Institution	Pulmonary			Non-Pulmonary		
	M.	F.	Ch.	M.	F.	Ch.
The Mount Sanatorium, Bishopstoke	89	—	—	—	—	—
Chandlers Ford Sanatorium	—	32	8	—	—	13
Highwood Hospital, Brentwood	—	—	1	—	—	—
Highgate Hospital, London	—	—	—	—	—	2
Nayland Sanatorium, Essex	—	1	—	—	—	—
Eversfield Chest Hospital, St. Leonards-on-Sea ...	—	6	—	—	—	—
Royal Hospital for Sick Children, Bristol	—	—	—	—	—	1
Royal National Sanatorium, Bournemouth	5	—	—	—	—	—
King George Sanatorium, Liphook	6	—	—	1	—	—
London Chest Hospital	—	2	—	—	—	—
Royal National Hospital, Ventnor	2	1	—	—	—	—
Lord Mayor Treloar Hospital, Alton	—	—	—	—	—	33
Firs Home, Bournemouth	1	—	—	—	—	—
Morland Hall, Alton	—	—	—	16	10	—
Holy Cross Sanatorium, Haslemere	—	11	—	—	—	—
Royal Sea Bathing Hospital, Margate, Kent	—	—	—	2	1	—
King Edward VII Sanatorium, Midhurst	—	1	—	—	—	—
Church Army Sanatorium, Farnham	—	—	—	—	—	1
Brompton Hospital, London	1	2	—	—	—	—
Preston Hall, Maidstone	6	—	—	—	—	—
Douglas House, Bournemouth	8	—	—	—	—	—
University College Hospital, London	2	2	—	—	—	—
Totals ...	120	58	9	19	11	50

The demand for institutional accommodation was maintained throughout the year and this was met only by obtaining beds in institutions not provided by the County Council while making the utmost use of the Mount and Chandlersford Sanatoria. The average numbers of beds occupied during recent years are as follows :—

1944 243, 1945 249, 1946 257, 1947 275.

These figures reflect the strenuous efforts which have been made to reduce the inevitable waiting period.

Thoracic Surgery.

The arrangements for thoracic surgery, thoracoplasty, cutting of adhesions, etc. have continued satisfactorily throughout the year although their is, unfor-

unately, delay in transferring to surgical units patients in The Mount and Chandlersford who require surgical treatment for pulmonary conditions. Patients in the County Sanatoria needing the lesser operative treatment of phrenic avulsion have been sent to the Royal Hants County Hospital. Details of major thoracic surgery undertaken under the County Scheme during the year are given below.

Thoracoplasty	...	...	...	14
Thoracoscopy...	...	...	...	52
Cavity drainage	...	...	...	1

Phrenic operations were performed at Royal Hants County Hospital as required for patients in the County Sanatoria, The Mount and Chandlersford.

Consultant in Thoracic Surgery.

Mr. N. F. Adeney, F.R.C.S. continued to visit the County Sanatoria as required during the year to consult with the Medical Superintendents on patients likely to derive benefit from surgical measures.

Laryngologist.

A Consultant Laryngologist visits the County Sanatoria as required to advise on the treatment of cases presenting throat symptoms.

Consultant in Bone and Joint Tuberculosis.

Mr. E. Stanley Evans, F.R.C.S. who is also Medical Superintendent, Lord Mayor Treloar Hospital, Alton, has examined patients referred by Tuberculosis Officers for bone and joint conditions of tuberculosis. Cases of surgical tuberculosis who have received the maximum benefit from institutional treatment attend the County Orthopaedic Clinics as required and are seen by the Surgeon there to avoid journeys to Lord Mayor Treloar Hospital when this is practicable.

Treatment Allowances.

The payment of Treatment Allowances under Ministry of Health Memo 266T continued throughout the year and there is no doubt that the help thus given removed anxiety at a difficult time from many homes. The number of new applications granted during the year ended 31st December is as follows, the figures for 1946 being given in brackets.

Standard Allowances	...	...	...	222	(165)
Discretionary Allowances	...	...	...	45	(43)
Special Payments	...	...	...	21	(28)

Care and After-Care Committee.

Fareham, Gosport and Havant Care and After-Care Committee continued its activities throughout the year particularly the distribution of clothing required by patients on admission to Sanatorium. The Committee was again able to distribute Christmas gifts not exceeding 10/- per family and a total of £30. for the area covered by the Committee.

Boarding-Out of Child Contacts.

Six children were boarded-out under the County Tuberculosis Scheme during 1947 to remove them from infection at home. This is, of course, a most valuable provision and sometimes has the particular advantage of saving a sanatorium bed as the patient is able to remain at home after the child contacts are removed.

Shelters, Beds and Bedding.

The portable shelters owned by the County Council and issued on loan for the segregation of tuberculous patients in their homes continued in demand and there are 40 of these shelters maintained under the Tuberculosis Scheme at the time of writing.

The provision on loan of beds and bedding where separate sleeping accommodation cannot otherwise be provided has also resulted in some easing of the pressure on Sanatorium accommodation and 38 issues of beds and bedding were made during 1947.

Miniature Radiography Survey.

During the year the County Council arranged for the services of the Miniature Radiography Team from Portsmouth to survey such parts of the County as time and facilities allowed. I am grateful to Dr. J. D. Lendrum, the Medical Director of the Team, for the following report on the work done.

The survey showed that in Hampshire, as elsewhere, there are quite a number of persons who have active tuberculous disease and are in need of treatment, but who have not yet been referred by their doctors or in many cases consulted a doctor. It is hoped that in 1949 a further survey may be arranged.

PART I.—COMMENT

Areas Surveyed.

The Unit commenced the Survey in the Christchurch Area immediately before the bad weather so well remembered in 1947.

The list below shows the itinerary.

TABLE 1.

<i>Headquarters</i>	<i>Dates of Visit</i>	<i>No. of Weeks</i>	<i>No. of Individuals Examined</i>
Gundimore, Mudeford	3rd February to 3rd March	4	2659
Messrs. Wellworthy, Lymington	3rd March to 24th March	3	1855
First Aid Post, Eastleigh	24th March to 9th May	7	6541
Messrs. Vickers-Armstrong, Hursley Park	9th May to 19th May	1	956
Messrs. Folland, Hamble	19th May to 2nd June	2	1819
Mid-Southern Utility Company's Annexe, Aldershot	2nd June to 24th June	3	See below
R.A.E., Farnborough	24th June to 11th July	3	3343
Mid-Southern Utility Company's Annexe, Aldershot	11th July to 14th August	5	5993
Pinewood, Farnborough	15th September to 3rd October	3	2156
The Gables, Gosport	13th October to 11th December	9	7492
Total			32814

The two gaps in the dates were firstly for the holiday period and secondly for the use of the Unit by Portsmouth City Council for their Health Exhibition. Portsmouth was financially responsible for the Unit during these two periods.

Preparations for Survey.

It may be of interest to give here an outline of the organisation necessary and method by which the Unit works.

After considerable preparatory talks and correspondence between the County Medical Department and the Medical Director of the Unit, the areas to be surveyed were decided upon by the County Medical Officer, chiefly on the basis of density of population. The latter was because it was desired to survey the maximum number of individuals in the time available, and, therefore, the difficult and time-consuming operation of moving the apparatus from one centre to another was reduced as much as possible. The Unit is not a mobile one, although it is transportable.

A suitable site for a headquarters had to be found in advance and the building prepared for use as an X-ray centre, involving chiefly the installation of an efficient darkroom, electrical connections, adequate heating, telephones, etc. Simple as this sounds, the finding of a suitable site occupied a considerable amount of time and the proposed survey of Basingstoke had to be abandoned because no such site could be found.

Propaganda was undertaken in advance of the arrival of the Unit when the site had been decided upon and the date known. This was done by the holding of a meeting in the area to which employers of labour and the voluntary organisations were asked to send representatives. The meeting was addressed by the Medical Director, who explained the purposes of Mass Radiography, appealed for the co-operation of employers, and answered questions. A film on Mass Radiography was usually shown.

A couple of weeks before the arrival of the Unit, the Liaison Officer called on employers and arranged definite appointments at their convenience for their employees, so that the Unit was enabled to commence work at full pressure as soon as it was installed.

Individuals usually arrive in groups of fifteen or twenty (or as specially requested) at intervals of twenty minutes or so, and strip to the waist, women putting on clean chest covers. They then pass into the card room, carrying their clothes with them, and details are recorded on special numbered cards, the number being photographed on to the individual's miniature film so that there can be no error in identity. After the X-ray has been taken they pass into a dressing room, the whole process normally taking about ten minutes.

When a miniature film is taken, X-rays throw a shadow on to a fluorescent screen and a photographic record of this screen image is made on 35 m.m. film by means of a special camera. After fifty such photographs have been taken, the roll is cut, processed, dried and projected on to a screen, the Medical Director examining each film closely. Where he feels that there may be some disease present, the person is asked to return for a full size X-ray, on which a decision is made as to whether to ask him to attend for a clinical examination; at the latter a recommendation is made as to treatment or further opinion and the individual is referred to his own doctor accordingly. Each patient who returns for a second film is written to, whatever the result.

It can be seen, therefore that there is a large amount of clerical work, recording and filing involved.

In each area where there was likely to be a demand, the Unit was thrown open to the general public, so that any individual who wished to do so, and not merely those in employment, could come through the Unit without a special appointment. These sessions are referred to as public sessions.

Central Organisation.

As will be seen from the number of moves, a great deal of organisation was needed. The Medical Director met with the highest possible degree of co-operation from the County Medical Officer and his staff, both before and during the Survey. Indeed it was largely owing to the co-operation and personal interest of the Chief Administrative Assistant, Mr. C. G. Cartwright, that all went so smoothly and satisfactorily, and I would like to express my thanks to the County Medical Officer and to Mr. Cartwright for their personal assistance to us and their sympathetic understanding of our problems and needs, as well as for their interest, without which the tour could not have been the success which I feel it was.

It may be of interest to record here that although the Unit moved its headquarters more times than in any other year (thirteen times), more individuals were X-rayed than in any other year since the Unit commenced working.

Co-operation of Employers.

The great majority of employers were very co-operative in giving their employees time off for the examination and much kindness was shown to us by those firms which provided a headquarters for the Unit. I feel that the co-operation of the Southern Railway (so different to the lack of it met during a similar survey in 1946) was in no small measure due to the interest taken by the Mayor of Eastleigh, Councillor T. W. Coles.

Co-operation of Public.

This was good as is shown by the number of individuals X-rayed. For many this was not the first experience of Mass Radiography: some had been X-rayed in other areas by a civilian Unit and many had been similarly X-rayed in the Services; some had been X-rayed by this Unit when it was working for another Authority, and this was especially noticeable at Mudeford (Bournemouth 1946), Eastleigh (Southampton 1946)

and Gosport (Portsmouth). It is encouraging to note that individuals are becoming aware of the importance of a *regular* X-ray of the chest and that the idea, still too prevalent, that one clear X-ray means freedom from tuberculosis for all time is disappearing.

TABLE 2—Public Sessions.

Place	No. of Sessions Held		No. of Individuals X-rayed during these Sessions		Average Number per Session	
	Male	Female	Male	Female	Male	Female
Mudford	4	5	108	239	27	48
Lymington	4	6	172	264	43	44
Eastleigh	5	6	372	970	74	162
Aldershot	6	6	300	660	50	110
Farnborough	4	6	182	614	45	102
Gosport	6	12	710	2085	118	174
Total	29	41	1844	4832	64	118

In connection with this table it should be added that the headquarters at Mudford were situate a considerable distance from Christchurch and although a special bus service was run for the public sessions, the weather was not encouraging. It will be noted that the greatest number of people came through during public sessions in the more industrial areas.

Electrical Supply.

At some of the headquarters the mains supply was inadequate for the Unit's need. We also had to contend with electricity cuts and reduced output from the generating stations. As a result of these factors, there were periods when the quality of the films was not as good as one would have wished and this in itself increased the proportion of large films which had to be taken.

Portsmouth placed an order for a mobile van three years ago and its value was demonstrated by its absence during the County Tour. A mobile van is in fact a mobile darkroom with its own generating plant, and the provision of such a van would have rendered us independent of electricity cuts and probably have enabled us to visit Basingstoke. The County Medical Officer kindly added his request for the provision of such a van to that of the Medical Officer of Health of Portsmouth, without effect.

Local Authorities.

I would like to thank the Officials concerned of all the local authorities in the areas which we visited for their co-operation. Great help was given in the finding of the premises and all the work of conversion was arranged by local Officials.

Liaison between the Medical Director and Medical Practitioners.

I would like to thank all the Tuberculosis Officers on the staff of the County Medical Officer for their co-operation. All cases considered to be suffering from tuberculosis and all cases considered to be in need of further observation (other than those re-X-rayed on the Unit) had perforce to be referred to the local Tuberculosis Officer, and whereas I feel that they may thereby have had many relatively early and, therefore, curable cases, they also had a great deal of extra work to do. In particular I would like to express my thanks to Dr. Joan Butterworth, who has had to deal with more such cases than any of the other Tuberculosis Officers.

For the most part the general practitioners were very co-operative. I could not obtain all the information required to enable a firm diagnosis to be made in all cases, but except where tuberculosis was concerned, a radiological diagnosis has been made in cases where this has been possible. Information required cannot be obtained in forty-nine cases, in spite of repeated requests.

In only one area was there any objection to the routine of referring observation or tuberculous cases direct to the Tuberculosis Officer, a full report being made at the same time to the panel or private doctor. I am glad to say that in this particular case I received a letter from the practitioner concerned showing that his doubts about this method of referring cases had been removed by the manner in which he was kept informed of any finding of significance in any of his cases. All practitioners were, of course, informed in the same manner.

Large Film Sessions for Tuberculosis Officers.

During the period at Gosport a request was made that we should take large films on Clinic Cases for the Tuberculosis Officer. I am glad to say that this was arranged at special sessions and a total of 86 films were taken.

PART II.—STATISTICS

The areas surveyed were of different types and it has been considered advisable to divide the areas into what may be regarded as industrial areas and otherwise. In the former group I have placed Eastleigh and Gosport, the whole of the remainder being regarded as non-industrial and being referred to in this report as "remainder."

TABLE 3.—Numbers Recalled.

Area	No. of Persons coming for Miniature X-rays			No. of Persons Recalled for Large Films	No. of Persons Examined by M.D.	No. Referred to Specialists for Observation or Treatment
	Male	Female	Total			
Christchurch ...	2033	626	2659	162 6.1%	52 2.0%	9
Lymington ...	1246	609	1855	117 6.3%	45 2.4%	10
Eastleigh ...	4426	2115	6541	574 8.8%	189 2.9%	42
Hursley Park ...	718	238	956	82 8.6%	26 2.7%	—
Hamble ...	1430	389	1819	99 5.4%	44 2.4%	14
Aldershot ...	6417	2919	9336	654 7.0%	219 2.3%	35
(including R.A.E.)						
Farnborough ...	1245	911	2156	151 7.0%	30 1.4%	5
Gosport ...	3947	3545	7492	505 6.7%	142 1.9%	34
Total	21462	11352	32814	2344 7.1%	747 2.3%	149

The many follow-up X-rays which were taken are not included in this table.

Comment has already been made about the slightly increased percentage of large films taken due to electrical difficulties.

Mental Hospital.

During the Eastleigh period, 51 cases from a Mental Hospital were X-rayed. In view of the small size of this total and the fact that no important abnormalities were discovered, the latter have been included in the general figures for Eastleigh and have not been recorded separately.

There were 9 cases of Inactive Tuberculosis (17.4%) and no cases of Active Tuberculosis.

The following table shows the statistical numbers in the different areas.

TABLE 4.

	Eastleigh		Gosport		Remainder		Total		Combined Sexes
	Male	Female	Male	Female	Male	Female	Male	Female	
No. X-rayed ...	4426	2115	3947	3545	13089	5692	21462	11352	32814
No. Incomplete ...	8	2	8	4	19	8	35	14	49
Statistical Total ...	4418	2113	3939	3541	13070	5684	21427	11338	32765
Combined Statistical Total	6531		7480		18754		32765		

TUBERCULOSIS.

I wish to stress that no case diagnosed as having tuberculosis has been included in the active groups unless there has been definite clinical evidence of this. This evidence has been the report of the Tuberculosis Officer concerned.

TABLE 5—CASES SHOWING EVIDENCE OF TUBERCULOSIS (all types).

	Eastleigh		Gosport		Remainder		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Combined Sexes
No. Examined	4418	2113	3939	3541	13070	5684	21427	11338	32765
No. of Cases of Inactive P.T.	359	103	200	163	708	228	1267	494	1761
No. of Cases of Active P.T.	20	9	15	15	30	13	65	37	102
Total Cases of P.T. ...	379	112	215	178	738	241	1332	531	1863
Percentage of No. Exam- ined	8.6	5.3	5.5	5.0	5.6	4.2	6.2	4.7	5.7
Combined Percentage ...	7.5		5.3		5.2		5.7		

TABLE 6.—CASES OF ACTIVE TUBERCULOSIS (by type of disease)

Type of Disease	Eastleigh		Gosport		Remainder		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Combined Sexes
Primary	1	2	—	1	—	2	1	5	6
Post Primary—Unilateral	7	2	7	7	15	8	29	17	46
Post-Primary—Bilateral	8	5	8	7	14	2	30	14	44
Effusions	4	—	—	—	1	1	5	1	6
Total	20	9	15	15	30	13	65	37	102
Rate per 1,000 examined	4.53	4.26	3.81	4.24	2.30	2.29	3.03	3.26	3.11
Combined rate per 1,000	4.44		4.01		2.29		3.11		
Unit's Combined rate for 1946 ...	(Total examined 38,895)						3.88		

Table 7 shows the age grouping of the cases in the different areas separately. In view of the fact that the two industrial areas combined bring the total figures of those examined nearer to the remainder, a further table, table 8, is given, from which a comparison between the industrial areas' figures and those of the remainder may be made more easily.

TABLE 7.—ACTIVE TUBERCULOSIS (by age groups)

		Under 17		17—24		25—34		35—44		Over 45		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Eastleigh	No. examined ...	469	445	698	593	1089	424	1006	348	1156	303	4418	2113
	No. of Cases ...	3	3	2	3	5	3	3	—	7	—	20	9
	Rate per 1,000 ...	6.40	6.74	2.87	5.06	4.59	7.08	2.98	—	6.06	—	4.53	4.26
Gosport	No. examined ...	722	902	509	879	861	745	809	581	1038	434	3939	3541
	No. of Cases ...	2	1	3	9	2	1	2	2	6	2	15	15
	Rate per 1,000 ...	2.77	1.11	5.89	10.24	2.32	1.34	2.47	3.44	5.78	4.61	3.81	4.24
Remainder	No. examined ...	1215	994	1660	1668	3250	1292	3160	967	3785	763	13070	5684
	No. of Cases ...	—	2	4	6	9	3	9	2	8	—	30	13
	Rate per 1,000 ...	—	2.01	2.41	3.60	2.77	2.32	2.85	2.07	2.11	—	2.30	2.29
Combined	No. examined ...	2406	2341	2867	3140	5200	2461	4975	1896	5979	1500	21427	11338
	No. of Cases ...	5	6	9	18	16	7	14	4	21	2	65	37
	Rate per 1,000 ...	2.08	2.56	3.14	5.73	3.08	2.84	2.81	2.11	3.51	1.33	3.03	3.26
Unit's Rate for 1946		0.84	4.26	4.51	8.25	2.19	3.19	4.45	1.96	5.57	1.97	3.41	4.38

TABLE 8.

	Under 17		17—24		25—34		35—44		Over 45		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<i>Industrial Areas</i> (Eastleigh and Gosport combined)												
No. examined ...	1191	1347	1207	1472	1950	1169	1815	929	2194	737	8357	5654
No. of Cases found	5	4	5	12	7	4	5	2	13	2	35	24
Rate per 1,000 ...	4.20	2.97	4.14	8.15	3.59	3.42	2.75	2.15	5.93	2.71	4.19	4.24
Unit's Rate for 1946	0.84	4.26	4.51	8.25	2.19	3.19	4.45	1.96	5.57	1.97	3.41	4.38
<i>Remainder</i>												
No. examined ...	1215	994	1660	1668	3250	1292	3160	967	3785	763	13070	5684
No. of Cases found	—	2	4	6	9	3	9	2	8	—	30	13
Rate per 1,000 ...	—	2.01	2.41	3.60	2.77	2.32	2.85	2.07	2.11	—	2.30	2.29

Table 9 shows the type of disease by age groups for each of the three areas.

TABLE 9a—ACTIVE TUBERCULOSIS (by type of disease and age groups)—EASTLEIGH.

	Under 17		17—24		25—34		35—44		Over 45		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Primary	1	1	—	1	—	—	—	—	—	—	1	2
Post Primary Unilateral	2	1	—	—	3	1	1	—	1	—	7	2
Post Primary Bilateral	—	1	2	2	1	2	1	—	4	—	8	5
Effusions	—	—	—	—	1	—	1	—	2	—	4	—
Total	3	3	2	3	5	3	3	—	7	—	20	9

TABLE 9b—GOSPORT.

	Under 17		17—24		25—34		35—44		Over 45		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Primary	—	—	—	1	—	—	—	—	—	—	—	1
Post Primary Unilateral	2	—	—	5	2	—	1	1	2	1	7	7
Post Primary Bilateral	—	1	3	3	—	1	1	1	4	1	8	7
Effusions	—	—	—	—	—	—	—	—	—	—	—	—
Total	2	1	3	9	2	1	2	2	6	2	15	15

TABLE 9c—REMAINDER.

	Under 17		17—24		25—34		35—44		Over 45		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Primary	—	1	—	1	—	—	—	—	—	—	—	2
Post Primary Unilateral	—	1	1	3	5	2	4	2	5	—	15	8
Post Primary Bilateral	—	—	3	1	3	1	5	—	3	—	14	2
Effusions	—	—	—	1	1	—	—	—	—	—	1	1
Total	—	2	4	6	9	3	9	2	8	—	30	13

TABLE 9d—COMBINED.

	Under 17		17—24		25—34		35—44		Over 45		Total	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Primary	1	2	—	3	—	—	—	—	—	—	1	5
Post Primary Unilateral	4	2	1	8	10	3	6	3	8	1	29	17
Post Primary Bilateral	—	2	8	6	4	4	7	1	11	1	30	14
Effusions	—	—	—	1	2	—	1	—	2	—	5	1
Total	5	6	9	18	16	7	14	4	21	2	65	37

Tuberculosis Figures.

Certain conclusions may be drawn from these tables. Table 8 shows that the industrial areas show a higher rate of active disease for both sexes in all age groups except the 35—44 group, where they are almost identical.

The amount of active disease found per unit of the population is almost twice as high in the industrial areas as in the remainder and it will be noted that in the industrial areas, with the exception of the under 17 age group, the figures for each sex in each age group are fairly similar to the Unit's figures for 1946. The latter figures include a survey of Southampton (5 months), Bournemouth (4 months) and Portsmouth.

If the first and second age groups are combined, it will be seen that :—

*Industrial Areas**Males*

This group contains 28.6% of all cases of active disease.

Females

This group contains 66.7% of all cases of active disease.

*Remainder**Males*

This group contains 13.3% of all cases of active disease.

Females

This group contains 61.5% of all cases of active disease.

Total for Whole Survey

Males—21.5%

Females—64.9%

TABLE 10—SOME OTHER ABNORMALITIES.

Abnormality	Eastleigh		Gosport		Remainder		Total		
	M.	F.	M.	F.	M.	F.	M.	F.	Com- bined Sexes
<i>Total Bony</i>	112	56	69	87	278	102	459	245	704
<i>This includes :—</i>									
Cervical Rib	5	12	1	9	12	10	18	31	49
Scoliosis	59	26	40	39	143	47	242	112	354
Klippel-Feil Syndrome ...	—	—	1	—	1	—	2	—	2
Hemi-Vertebra	—	1	—	—	—	—	—	1	1
<i>Pulmonary :—</i>									
Atypical Pneumonia ...	3	2	5	2	5	1	13	5	18
Bronchitis and Emphysema	22	4	8	4	37	3	67	11	78
Atelectasis	—	—	2	1†	4†	1	6	2	8
Bronchiectasis	9	1	4	1	13	3	26	5	31
Non-Tuberculosis Fibrosis	22	5	6	2	59	10	87	17	104
Basal Fibrosis or Pleurisy	119	33	81	46	292	61	492	140	632
Lung Abscess	—	—	1	—	2	—	3	—	3
Pneumokoniosis	1	—	—	—	8	—	9	—	9
Congenital Cystic Disease	—	—	3	—	2	—	5	—	5
<i>Cardio-Vascular :—</i>									
<i>Congenital Heart Disease</i> ...	—	1	1	2	2	2	3	5	8
<i>This includes :—</i>									
Transposition of Aorta ...	—	—	—	1	—	—	—	1	1
Dextro-cardia	—	—	1	—	—	1	1	1	2
Co-actetation of Aorta ...	—	—	—	—	1*	—	1	—	1
<i>Acquired Heart Disease</i> ...	36	14	19	23	91	25	146	62	208
<i>This includes :—</i>									
Syphilitic Aortitis ...	—	—	1	—	—	—	1	—	1
Aortic Aneurysm... ..	—	—	2	—	2	—	4	—	4
Failure	—	3	—	2	2	1	2	6	8
<i>New Growths :—</i>									
Carcinoma of Bronchus...	—	1	1	—	2	—	3	1	4
Chondroma	—	—	—	—	6	1	6	1	7
<i>Miscellaneous :—</i>									
Stress Fracture	1	—	1	—	1	—	3	—	3
Foreign Bodies	6	—	9	—	25	—	40	—	40
Diaphragmatic Hernia ...	1	—	—	1	1	1	2	2	4
Eventration	—	—	—	—	1	3	1	3	4

†Follow-up films showed that in three of these cases re-aeration had taken place. The cause of the other two is unknown.

*This man was aged 63, served throughout the 1914 War, was very fit, except for some dyspnoea, and was working.

HISTORY OF INSTITUTIONAL TREATMENT OF TUBERCULOSIS IN HAMPSHIRE.

In view of the changes under the National Health Service Act, 1946, Dr. W. J. Hart, Deputy County Medical Officer and Chief Clinical Tuberculosis Officer, has very kindly prepared this history of the institutional treatment of Tuberculosis in the County Area.

Public treatment for tuberculosis in Hampshire, as in other areas, had its origin in the duty of the County Insurance Committee to provide sanatorium benefit and domiciliary treatment for insured persons.

The County Council in August, 1912 received a request from the Hampshire Insurance Committee that it should allow the County Medical Officer to act as Medical

Adviser to the Insurance Committee, and further, that the County Council should increase its Assistant Medical Officers from three to six so as to carry out work in tuberculosis as well as school inspection, the salaries being shared by the Council and Insurance Committee.

The request resulted in a joint Meeting of the Public Health Committee and the Sanatorium Benefit Sub-Committee of the National Insurance, which agreed that there should be one Authority for the whole area providing dispensary and sanatorium treatment for tuberculosis, and that such treatment should be available for the whole community and not only for insured persons and their dependants.

In February, 1913 the County Council considered a Scheme for the appointment of Tuberculosis Officers who would combine this work with other Public Health work, and of additional nurses, and for establishment of dispensaries and the provision of a sanatorium for 100 beds.

This Scheme for the treatment of tuberculosis was postponed because a new Council was about to be elected. At the new County Council in November, 1913 the Scheme was turned down but in February, 1914 it secured approval except for the provision of a sanatorium and the Council ordered that further enquiry be made into cost of such sanatorium and the sites available.

In March, 1914 the Local Government Board suggested that additional hospital beds for tuberculosis should be provided by erection of new Pavilions at existing Isolation Hospitals in the County. The Public Health Committee agreed to this suggestion and authorised C.M.O. to make enquiries as to what facilities could be afforded in this way.

In May 1915 it was reported that there had been much difficulty in making arrangements with the district councils owning the Isolation Hospitals and Andover R.D.C. was the only one mentioned at which the erection of a Pavilion could be contemplated. The need for beds for the advanced cases which outside sanatorium refused was commented on.

In the meantime the C.M.O. was authorised to arrange treatment for patients at outside sanatoria and the Treasurer to pay for the acceptance of such patients in sanatorium on the certificate of the C.M.O.

The combined purchase, with the co-operation of Reading, of Pinewood Sanatorium was considered in 1915, but it was decided that the sanatorium was inaccessible from a large portion of Hampshire. Then financial stringencies due to the war, 1914—1918, were being felt, and a Retrenchment Committee was formed which in February, 1916 ordered an enquiry into the working of the Tuberculosis Scheme. Such an enquiry was made by the Local Medical Insurance Committee presumably because the Insurance Committee were bearing the payment of sanatorium benefit for all insured persons. Of this Committee twenty six members were in favour and thirteen were against the erection of a County Sanatorium and for the time being this lack of unanimity together with war retrenchment closed further plans for the building of a new institution in the County.

Accordingly contracts were entered into with various sanatoria and the following beds were secured for the sole use of patients in the County area; at the Hermitage Sanatorium 20 beds at a cost of £75 per annum each; Whitmead Sanatorium 20 beds at a cost of £75 per annum; St. Catherine's Home, Ventnor 16 beds at £76 per annum. Isolated cases were also sent to Victoria Hospital, Winchester; Hawthorndene Sanatorium; Bonchurch; Royal Sea Bathing Hospital and Brompton Hospital.

In October, 1914 the first report of numbers of patients under treatment gave 45 insured and 12 uninsured persons.

						<i>Insured</i>	<i>Uninsured</i>
St. Catherine's Home	...	...	...	...	...	14	—
Hermitage Sanatorium	...	...	...	...	...	16	—
Whitmead Sanatorium	...	...	...	...	...	8	10
Victoria Hospital	...	...	...	...	...	5	1
Hawthorndene Sanatorium	...	...	...	...	...	1	—
Royal Sea Bathing Hospital	...	...	...	...	...	—	1
Brompton Hospital for Consumption	...	...	...	...	...	1	—
						45	12

Later in the same year additional beds were secured for County use as follows—four at the Church Army Home Sanatorium Fleet at £50 per annum for children, and

early in 1915 ten beds at the Royal National Sanatorium, Bournemouth at £75 per annum.

The average length of treatment in these early days was three months; and a report of the names of patients who had been in institution over two months was made by the County Medical Officer. The number of persons having sanatorium treatment gradually increased. In January, 1915 there were fifty insured and twenty-seven uninsured and in July, 1916 there were forty-two insured and forty uninsured. Among the uninsured are included all children so that if we consider all cases of Pulmonary Tuberculosis the proportion of insured to uninsured is large.

An analysis of treatment during the year 1916 shows that 283 patients were discharged from sanatoria. The average number of beds maintained was 71.2 and the average stay in institution was ninety-two days. The figures can be sub-divided as follows :—

	Adult		Children	
	Pulmonary	Non-Pulmonary	Pulmonary	Non-Pulmonary
No. of beds	46.7	5.1	10.5	8.9
Length of Stay (days)	72	235	128	271

During the next year, 1917, the number of uninsured persons went up; because more children were being sent to Lord Mayor Treloar Hospital, Alton; the total number of in-patients had increased to 104 and the distribution was as follows :—

	Male Patients		Female Patients		Total Patients	
	Insured	Uninsured	Insured	Uninsured	Insured	Uninsured
The Hermitage Sanatorium, I.O.W.	17	4	—	—	17	4
St. Catherine's Home Ventnor....	—	7	—	12	—	19
Royal Sea Bathing Hospital ...	2	3	1	2	3	5
Royal National San. Bournemouth	12	2	6	11	18	13
Lord Mayor Treloar Hosp. Alton	—	11	—	7	—	18
Firs Home, Bournemouth ...	—	—	—	2	—	2
Hawthorndene Sanatorium, Bon-church	—	—	3	1	3	1
Shedfield Cottage Hospital ...	—	1	—	—	—	1
	31	28	10	35	41	63

On the 18th November, 1918 one week after the Armistice the County Council authorised the purchase of Northerwood House and Park, Lyndhurst for adaptation as a County Sanatorium; and on the following day an application for approval was made to the Local Government Board. Memorials against this scheme were sent to the L.G.B. by certain inhabitants of Lyndhurst and District so that an enquiry by a Medical Inspector of the L.G.B. was held at Kings House, Lyndhurst. The approval of the L.G.B. arrived on the 9th January, 1919 together with an offer of grant towards the scheme but on communicating with the vendor it was found that a contract for sale elsewhere had been made two days previously.

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During 1918 the number of patients in sanatoria had reached a hundred; the distribution being much the same as before and the average length of stay still thirteen weeks. In 1919 it rose to 120. More beds were secured at Heather Tor Sanatorium, Dowsland; and the number at the Royal National Sanatoria, Bournemouth increased to thirty. There had always been difficulty in finding beds for advanced cases, as when applications were made to outside sanatoria these cases were frequently rejected. In order to facilitate the acquisition of a hospital or sanatorium for these and other cases the County Council in February, 1919 gave authority to the Public Health Committee to purchase suitable premises for tuberculosis sanatorium and hospital with the approval of the L.G.B.

As a temporary measure it was decided to use Trafalgar House in Winchester. This building had been a preparatory school for boys which during the 1914—18 War was converted into a Red Cross Convalescent Hospital; and it became the property of the Hampshire County Council owing to its proximity to other Castle buildings. When vacated by the Red Cross in 1919 it was handed over to the Public Health Committee for use as a temporary hospital for acute and advanced cases of Pulmonary Tuberculosis. It was opened at the end of 1919 for eighteen adult patients of either sex. The Medical Officer was Dr. W. J. Hart and the Matron, Miss I. L. Baker.

For a more permanent institution the lease of the Hursley Union Infirmary was taken for 21 years at £500 a year in 1920. This institution was built in 1900; had had comparatively little use and needed no structural alteration. It was easily adapted for sanatorium purposes, was on a gentle south slope, on gravel soil and very free from fog; possessed eight acres of grounds. Arrangements were made for the installation of electric lighting and dynamos and the provision of a gas main, additional cooking equipment and general re-painting. The Hants Insurance Committee gave a grant of £400 which provided a large recreation hall of wooden construction. In August, 1921 Trafalgar House was closed and the patients, staff and equipment were transferred to the new Chandlers Ford Sanatorium. The building was in one main block; with two equal wings and staff quarters in the centre. It accommodated sixteen men and sixteen women. A large separate Board Room was converted into a children's ward of eight beds. The Sanatorium still had to take advanced cases from all County areas but as it held double the number of adults in Trafalgar House it was able to deal with a more varied type of case, and some with a favourable outlook and in 1923 the first case there had artificial pneumothorax initiated.

When the Mount Sanatorium for men was opened in 1925 the male patients from Chandlers Ford were sent there and henceforth the latter sanatorium dealt with women and children. In 1931 a new and larger dining hall was erected and the room, formerly used for meals was able to accommodate seven additional women patients also a first floor was added to a detached staff residence so as to increase its accommodation. In July, 1933 the County Council appropriated the Institution under the provision of Section 113 of the Local Government Act of 1929.

On the outbreak of war in 1939 a large children's ward was diverted to the use of eight women patients evacuated from the Southampton Borough Institutions and some four years elapsed before it was restored to its former use. No noteworthy alterations in the economy of the Sanatorium has occurred since then.

During 1920 the number under treatment rose steadily to 185; most of the increase were children, of whom there were now thirty-four in Treloar Hospital, Alton and thirty-six in Heather Tor Sanatorium. Trafalgar House now appears on the list as having seventeen patients.

In April, 1921 the operation of sanatorium benefit under the National Health Insurance Act was discontinued. The Public Health (Tuberculosis) Bill, 1921 transferred to Counties and County Boroughs the obligation to provide institutional treatment for tuberculosis for insured persons which was formerly held by the National Health Insurance Committee. There remained some difference between insured and uninsured, in that their insurance entitled the former to sanatorium treatment without making any contribution towards its cost, while uninsured were called upon to pay a weekly contribution which was assessed according to their income. The sum called for varied from 2/- a week to the full cost of maintenance.

In 1921 there was a post-war economy campaign; as a result of this the amount of treatment was cut down and the number of patients reduced. In 1921 the quarterly return of numbers of patients in sanatorium gave on the 1st March, 172, 1st June, 175, 1st September, 190 1st December, 114. The average length of stay during that year was increased to 130 days and was higher still for bone and joint cases. This restriction of in-patients continued throughout 1922 but in 1923 the stringencies were released and numbers returned to their former levels, namely to a maximum of 190. The quarterly returns during these years usually shows a higher figure in winter than in summer, for at a time when treatment was by diet, fresh air and medicines without the active measures of to-day many patients tended to leave during the summer to carry on in their own homes.

The extent of Sanatorium treatment provided by the County since its inception in 1914 up to 1925 was as follows:—

Year	Insured		Uninsured		Total		Average No. of patients under treatment
	Number	Average stay (Days)	Number	Average stay (Days)	Number	Average Stay (Days)	
1914	159	93	49	89	208	92	53
1915	180	87	81	97	261	90	64
1916	166	79	76	98	242	85	58
1917	208	78	132	110	340	91	85
1918	219	71	153	125	372	93	95
1919	247	80	168	165	415	115	131
1920	220	84	232	138	451	112	138
1921	177	93	223	186	400	145	159
1922	128	114	147	160	275	139	104
1923	240	119	199	179	439	146	175
1924	197	115	293	150	490	136	183
1925	197	111	202	174	399	143	158

It may be noted that the number of beds provided is greater than the average number of patients, as for one reason or another some beds are at times empty (painting, cleaning, epidemics in children's wards and so on.)

The Mount Estate at Bishopstoke was purchased by the County Council on the 24th June, 1921 for £21,625. It had been a private residence with a large museum, had attractive grounds with many specimen trees, part on the level and an extensive part going steeply down to a branch of the river Itchen which formed one of the boundaries of the estate. With it were associated two farms which the County Council took over with the estate. The house and grounds comprised sixty-seven acres, Breach Farm thirty-nine acres, Highbridge farm seventy-eight acres.

More alterations were needed here than at the County's first sanatorium at Chandlers Ford; and plans were made for providing a new dining room, recreation room and installing lighting, furnishing and equipping at a total cost of £7,600 but in August, 1922 this sanction was rescinded and a grant of only £2,180 was allowed. This was the period of post-war economy. In 1923 the County Council held two meetings in February; the second for the purpose of receiving reports on County Expenditure. At this it ordered the Public Health and Housing Committee to report on the desirability of disposing of the Mount Estate.

In May, 1923 those appointed, by a majority of four to two, reported that The Mount should be retained, should be put into occupation for thirty beds, with a view to possible extension to a hundred and sixteen beds. After a year or two of delays the house was fitted up as an administrative block, the large museum with a new open-air section provided ward accommodation for twenty-eight patients, and the sanatorium was opened in September, 1925 for twenty-eight men. Of these fourteen came from the Chandlers Ford Sanatorium, which henceforth was closed to men. Dr. Hart was in charge for the first few weeks of the sanatorium's existence, and then handed over the medical duties to Dr. Tate, a member of the County Medical Staff, who did not, however, reside at the Institution. The first Matron was Miss Lock.

Plans for increasing the accommodation were later approved, and a new modern block in the form of a crescent with some wards of eight beds and a number of small rooms for one or two patients was opened for public inspection in January, 1928 and occupied a week or two later. Other new constructions were a medical block for examinations, consultations and minor surgery (part of which was later used to accommodate an X-ray plant) and a large patients dining room with kitchens, servery and stores.

The number of patients was now seventy-three and such as to require a Resident Medical Superintendent, so that in 1928 Dr. B. L. Lloyd was appointed to that post, although it was not until six months later that he was able to enter the new house that was being built for the Medical Officer.

In 1930 a new wing of twelve staff bedrooms was built, and in 1936 a chapel was constructed, much of the interior work being met by a fund that had been privately subscribed. The chapel was dedicated in April, 1936 by the Bishop of Southampton.

The Mount was for many years able to treat all men with Pulmonary Tuberculosis living in the Administrative County. Indeed for some three or four years a small number of men from the L.C.C. (about 7) was accepted so as to keep the beds fully occupied.

Dr. Lloyd gave up the charge of The Mount Sanatorium in 1935 to take up work as District Tuberculosis Officer. He was succeeded for a short period by Dr. Tibbles, then in 1936 Dr. A. Capes became Medical Superintendent. Under his guidance occupational therapy was organised and the Toy Industry developed. At first the patients were provided with tools and under the supervision of a patient who was a carpenter they made wooden articles for diversion and sometimes for sale. In 1942 when there was a dearth of children's toys, Dr. Capes organised the making and sale of good class toys, designed to be colourful, interesting and educative. As a beginning handwork and a foot lathe were used; then came a small electric motor for lathe and saw; then machines for drilling, planing and buffing were added as the Industry grew. At first only men under treatment in the sanatorium were employed, later ex-patients were kept on after their discharge and in 1945 Highfield House opposite the sanatorium was acquired as a hostel to hold eleven such workers.

The Industry except in so far as it made use of sanatorium premises, lighting and power, and made certain demand on Staff, was financially independent until 1946 when it was taken over by the County Council. It now has an established position and its trade-mark "Mountoys" is well known in many quarters.

The women's Sanatorium at Chandlers Ford was too small to deal with all Hampshire cases so that a number were sent to the Royal National Sanatorium, Bournemouth and other advanced cases to the Firs Home. The problem of dealing with chronic cases of lung disease who required long periods of segregation because they could not be accommodated at home, or of advanced cases who needed nursing was always present, as these types tended to clog the intake of other patients into the sanatorium.

In 1933 in order to ease the position a detached block in the Gosport Public Assistance Institution was adapted to take ten women suffering from chronic or advanced disease. It contained one large ward, four small wards and one large day room. It continued to give useful service until it was closed through enemy action in 1941.

In the search to replace the wards lost, it was noted that there were two empty blocks in the Civil Isolation Hospital at Aldershot and in 1941 an agreement was made between the County Council and the Aldershot Borough Council whereby a block of twelve beds was prepared for the reception of female cases of chronic pulmonary tuberculosis needing segregation or nursing; and the Hampshire County Council agreed to pay 50/- a week for each patient (later increased) with a minimum yearly payment of £1,000. The following year a second block was similarly allocated so that up to twenty women could be taken. Owing to the shortage of nursing staff, general throughout the Country, the beds available were reduced to fourteen in July, 1944 and the Hospital continued to take cases until December 1945, when the wards were closed.

About 1930 the number of patients in institutions were fewer than in the previous years; the death rate had fallen considerably since the end of the war, from 0.84 to 0.55 per 1,000 and there was as yet little increase in the scope of active treatment which was soon to make its influence felt in the demand for longer periods of institutional treatment. The average number of beds available for all cases of tuberculosis during the year 1930 was males 75 females 43 children 42 giving a total of 160. A Return showing the extent of residential treatment during the same year was as follows:—

		In Institutions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31st.
Number of Patients	Adults					
	M.	70	137	115	17	75
	F.	33	90	58	18	47
	Children					
	M.	18	18	16	—	20
	F.	20	7	16	—	11
Number of Observa- tion Cases	Adults					
	M.	—	2	—	—	2
	F.	—	11	8	—	3
	Children					
	M.	2	11	5	—	8
	F.	4	14	13	—	5
	Totals	147	290	231	35	171

The distribution in different institutions was The Mount, Bishopstoke 66 men. Chandlers Ford 28 women. 23 children. Lord Mayor Treloar Hospital 19 children. Bone and Joint. Royal National Sanatorium, Bournemouth 7 women Pulmonary. Firs Home 5 women advanced Pulmonary. King George Sanatorium, Liphook 5 men Bone and Joint. Royal Sea Bathing Hospital 4 adults Bone and Joint.

From this time until the beginning of the second war there was no noteworthy change in the general arrangements for sanatorium treatment in the County. The number of patients in institutions was 160 to 170 in the early years of the decade, it dropped to below 140 for two or three years and began to rise again in 1937.

These years saw a steady decline in the County death rate from tuberculosis, from about 0.77 per thousand to 0.47 per thousand in one decade, also a related fall in the incidence of disease. The smaller number of new cases was reflected in the fall in the number of persons in institutions above-mentioned; but the development of modern treatment soon resulted in longer periods of residence in sanatoria, and caused a rise in numbers of beds to be provided which has continued up to the present.

The two sanatoria owned by the County, Chandlers Ford and The Mount, were not institutions of sufficient size to have facilities for major surgical work so that operative treatment for persons needing it was arranged elsewhere. The operation of thoracoplasty and the cutting of adhesions for the improvement of lung collapse with Artificial Pneumothorax for Hampshire cases was carried out at the London Chest Hospital, Brompton Hospital, University College Hospital and Boscombe Hospital. Phrenic nerve operations have been done at the Royal Hants County Hospital, Winchester.

Ever since sanatoria existed the Physicians in charge of them have complained that the majority of cases of Pulmonary Tuberculosis reach them with an amount of disease too great to give prospect of arrest or cure. The early X-ray photographs of chests, made at first on glass plates were, too crude to be of much use; but as the technique of Radiography developed, it became possible to detect disease in early stages, and before symptoms arose. The invention of apparatus for taking miniature photographs of the X-ray projection of the lung on a screen opened up a practical method of detecting tuberculosis in the general population.

In December, 1942 the Ministry of Health informed Local Authorities that a batch of apparatus for miniature radiography were in construction and that some were for the Services but seventeen were to be offered to seven County Councils and ten County Boroughs for their own use and for neighbouring Authorities.

In order that those persons found by Radiographical Survey to have early disease should be encouraged to seek treatment it was decided that Financial Assistance should be given to all who suffered loss of income through giving up occupation in order to undergo treatment for Pulmonary Tuberculosis. Details of the Scheme of grants were later issued in the well known Memo 266 T. of the Ministry of Health; and the National Exchequer paid back to Local Authorities the full cost of grants made in accordance with the scales set out in the Memo.

Payments of Maintenance Allowance to patients and to their dependants began on August 1st, 1943; the Scheme did not apply to forms of Tuberculosis other than Pulmonary but the County Council from that same date abolished the contributions it had required from certain uninsured patients and all Treatment for Tuberculosis became free.

During the war and in the post-war period the County Sanatoria have experienced the same difficulties that have beset hospitals in general. Shortages of staff of all kinds, nursing, domestic, porters and gardeners have been at times serious and have thrown considerable strain on the senior officers responsible for the efficient running of the institutions. At the same time the number of applicants for treatment has increased, admission lists are swollen and waiting periods extended.

The average number of beds in sanatoria occupied by Hampshire cases during recent years has shown a marked increase:—

1940	—	181
1941	—	188
1942	—	211
1943	—	243
1944	—	243
1945	—	243
1946	—	259
1947	—	275

The reasons for this increase in residential treatment were varied and included the following:—The trend of modern treatment increased the use of surgery and implied longer periods of hospital and sanatorium care. The incidence of tuberculosis rose owing to war conditions, although not so markedly as in the 1914–18 war. The granting of maintenance allowances has enabled patients, particularly breadwinners,

to undertake early treatment and to remain longer in sanatorium than heretofore. Radiographical surveys have disclosed the existence of early cases and so temporarily added to the large waiting lists. The housing shortage has accentuated the need for removal of infectious cases for the prevention of infection, while the enrolment of women in Services and factories has left fewer in the homes who can look after their sick and convalescent relatives. There are as yet no indications that the difficulties and pressure on the sanatorium will be relieved.

The future planning of Sanatoria and the development of the work carried on therein will depend much on whether an effective chemical therapeutic agent like streptomycin will be found or, whether surgical measure will be further expanded.

On July 5th, 1948 sanatoria will cease to belong to the County Council. In-so-far as it may be said that only the largest counties have been able satisfactorily to provide the whole range of sanatorium and surgical treatment of tuberculosis, the enlarging of the administrative unit to a Region should have good results. Those Councillors and members who have given their services on committees dealing with tuberculosis, are able to continue their work on the corresponding committees of the Regional Hospital Board and so retain their interests in the Prevention and Treatment of Tuberculosis.

CANCER.

The total number of deaths from Cancer in 1947 in the Administrative County was 1,029 giving a crude rate per 1,000 population of 1.85. Deaths from Cancer classified according to age and sex are shown in the following table :—

Ages	MALE				FEMALE			
	Buccal Cavity and Oesophagus	Stomach and Duodenum	Breast	All Others	Uterus	Stomach and Duodenum	Breast	All Others
URBAN								
0—	—	—	—	1	—	—	—	—
1—	—	—	—	3	—	—	—	—
5—	—	—	—	1	—	—	—	1
15—	—	6	—	13	—	—	7	16
45—	7	15	—	76	18	10	29	49
65—	19	36	—	114	19	40	26	98
TOTALS	26	57	—	208	37	50	62	164
RURAL								
0—	—	—	—	—	—	—	—	1
1—	—	—	—	1	—	—	—	1
5—	—	—	—	—	—	—	—	—
15—	—	—	—	7	3	1	7	8
45—	5	19	—	61	10	5	18	39
65—	19	28	—	87	10	14	20	61
TOTALS	24	47	—	156	23	20	45	110

Regional Radium Centre, Southampton.

Dr. Taylor, Radiotherapist, has again very kindly supplied me with the following information relating to the work of the Centre during 1947 :—

The total number of new cases from Hampshire registered at the Royal South Hants Hospital as potentially malignant in 1947 was 367.

Those having radiotherapy at the Hospital	268
Those having no treatment owing to extent of disease, age of patient, etc. ...	62
Those having other treatment ...	37
	<u>367</u>

Of the 367 cases registered as potentially malignant, 30 were proved non-malignant, of which 8 were treated with radiotherapy and 9 with surgery.

Of the 260 cases proved malignant and treated with radiotherapy 104 were early cases and 156 late.

The Diagnostic and Follow-up Clinics were held weekly at Southampton and once a fortnight at Winchester during the year.

**CASES REGISTERED AND PROVED MALIGNANT AT SOUTHAMPTON
IN 1947.**

Site	South- ampton	Hants.	Dorset	Wilt- shire	I.O.W.	Ports- mouth	Bourne- mouth	Others	Total
BUCCAL CAVITY :									
Radiotherapy	28	48	22	10	15	10	—	1	134
Other treatment	1	—	1	1	—	—	—	—	3
No treatment	1	6	1	1	4	—	1	1	15
DIGESTIVE ORGANS :									
Radiotherapy	6	7	3	2	4	—	—	1	23
Other treatment	18	8	—	—	4	—	—	—	30
No treatment	30	10	2	1	18	1	—	—	62
RESPIRATORY ORGANS :									
Radiotherapy	10	18	6	2	2	—	—	—	38
Other treatment	1	—	—	—	—	—	—	—	1
No treatment	5	6	1	1	—	—	—	1	14
FEMALE GENITAL ORGANS :									
Radiotherapy	65	79	33	17	24	14	8	1	241
Other treatment	13	11	1	—	6	—	—	—	31
No treatment	6	10	9	2	7	—	—	—	34
MALE GENITAL ORGANS :									
Radiotherapy	2	3	5	—	—	—	—	—	10
Other treatment	8	6	—	—	1	—	—	—	15
No treatment	—	1	—	—	—	—	—	—	1
URINARY TRACT :									
Radiotherapy	6	8	2	—	—	—	1	—	17
Other treatment	5	1	—	—	—	—	—	—	6
No treatment	1	4	1	—	1	—	—	—	7
SKIN :									
Radiotherapy	68	70	36	15	30	—	2	—	221
Other treatment	5	2	—	—	—	—	—	—	7
No treatment	—	6	3	1	1	1	—	1	13
NERVOUS SYSTEM :									
Radiotherapy	2	4	—	—	—	—	1	—	7
No treatment	1	3	—	—	—	—	—	—	4
EYE									
Radiotherapy	—	1	—	1	—	—	—	—	2
DUCTLESS GLANDS :									
Radiotherapy	1	1	1	5	—	—	—	—	8
No treatment	1	—	—	—	—	—	—	—	1
SARCOMA :									
Radiotherapy	15	21	5	1	5	—	2	2	51
Other treatment	1	—	1	—	—	—	—	—	2
No treatment	3	3	2	—	1	—	—	—	9
TOTALS :									
RADIO THERAPY	203	260	113	53	80	24	14	5	752
OTHER TREATMENT	52	28	3	1	11	—	—	—	95
NO TREATMENT	48	49	19	6	32	2	1	3	160
TOTAL NEW PATIENTS REGIS- TERED AND PROVED MALIGNANT	303	337	135	60	123	26	15	8	1007

N.B. All the radiotherapy was done at the Royal South Hants Hospital but some of the surgery was done at other hospitals.

RADIOTHERAPY CLINICS IN 1947.

<i>Hospital</i>	<i>Attendances</i>		
	<i>Old Patients.</i>	<i>New Patients.</i>	<i>Total</i>
Salisbury General Infirmary	613	81	694
I.o.W. County Hospital, Ryde	708	144	852
Royal Hampshire County Hospital, Winchester	682	114	796
Dorchester County Hospital	532	91	623
Weymouth and District Hospital ($\frac{1}{2}$ year)	210	65	275
	2745	495	3240
Total attendances at the Royal South Hants Hospital for examination and follow-up			4797
			8037

BLIND.

During 1947 51 males and 79 females were certified as blind. The number and ages as on 1st October, 1947 of those for whom ages were given were as follows :—

	Under 40	—50	—60	—70	—80	over 80
Males	7	1	4	10	15	12
Females	4	2	8	20	25	19

As was to be expected the majority were aged 60 or over when found to be blind but it is noted that 24 per cent of males (i.e. 12 out of 49) and 18 per cent of females (i.e. 14 out of 78) were under the age of 60.

The causes of blindness in these cases were as follows :—

<i>Age when notified</i>	<i>Sex</i>	<i>Cause</i>
Less than 1	M	Aplasia of retina (congenital)
1	F	Optic atrophy
1	M	Interstitial Keratitis (congenital not syphilitic)
4	M	Aplasia of retina (congenital).
7	M	Cataract—nystagmus.
13	M	Hydrocephalus—optic atrophy
15	F	Congenital nystagmus, deformed discs etc.
16	M	Cataract—nystagmus
16	M	Nystagmus—optic atrophy
20	F	Injury—Iridocyclitis
31	F	Ophthalmia Neonatorum
40	M	Myopic degeneration
47	F	Corneal opacities due to infection
47	F	Detached retina (cause unknown).
50	M	Myopia with degeneration of choroid, etc.
52	M	Corneal ulceration
54	F	Choroiditis—chronic nephritis
55	F	Myopia with retinal degeneration
55	F	Injury
55	F	Retinitis pigmentosa
56	F	Diabetic retinitis
57	M	Myopic degeneration, detachment and cataract
58	F	Myopia and infection
58	F	Cataract
58	M	Myopia—retinal detachment
59	F	Cataract—nystagmus.

VENEREAL DISEASES.

The following Tables show a welcome reduction in the number of persons suffering from venereal diseases and attending Clinics for the first time in 1947. In Table II the reduction in the number of females attending with primary syphilis or early gonorrhoea from 100 to 59 and 367 to 236 is particularly to be noted.

Table I.

Number of cases resident in the County Area (both sexes) who attended Clinics for the first time during the years stated.

Year	1939	1940	1941	1942	1943	1944	1945	1946	1947
Syphilis ...	73	63	109	133	137	118	123	208	141
Gonorrhoea...	127	108	128	109	117	151	194	308	215
Non-V.D. ...	133	113	199	225	474	545	785	679	575

Table II.

Number of first attendances made at all Clinics serving Hampshire (except Southampton).

Year	Male										Female								
	1939	1940	1941	1942	1943	1944	1945	1946	1947	Southampton added	1939	1940	1941	1942	1943	1944	1945	1946	1947
Primary Syphilis	31	25	44	40	46	58	139	209	212		8	14	28	32	52	41	65	100	59
Secondary Syphilis	20	35	30	30	28	36	16	73	65		21	42	54	62	83	90	144	123	102
Other	110	76	96	93	103	83	90	99	86		74	89	91	95	126	119	132	127	116
Congenital	16	22	20	30	41	20	18	22	35		37	40	48	39	35	46	45	37	33
Gonorrhoea first	541	368	316	232	241	344	510	1181	1029		154	164	262	238	319	298	562	367	236
Gonorrhoea later	33	40	42	20	43	14	17	19	22		13	54	40	41	75	41	30	15	3

Table I above refers to patients attending the following clinics :—Aldershot, Basingstoke, Bournemouth, Guildford, Portsmouth, Reading, Salisbury, Southampton and Winchester.

The number of first attendances mentioned in Table II refers to all cases attending the Clinics mentioned and include cases from other areas (*e.g.*, the County Boroughs) than the Administrative County. It is reproduced here to show the general trend in the area of first attendances for early and later manifestations of disease.

Expectant Mothers.

As in previous years the taking and testing of blood from expectant mothers attending ante-natal clinics was advocated and carried out in 1,660 cases. The number of samples found to give a positive Wassermann reaction was 17 in 1947 and the proportion 1.03 as against 0.83 in 1946.

Regulation 33B.

The Defence Regulation 33B which came into operation at the beginning of 1942, expired on the 31st December, 1947.

The following Tables set out the number of notifications received and the results of action taken. There was always considerable difficulty in tracing and persuading cases named on the notifications to attend clinics.

The number of notifications received has diminished rapidly since 1946 when the total number recorded was 78 ; in the year before that (1945) 115 notifications were recorded.

' Single ' Notification Cases.

Notifica- tions recd.	Submitted to examination		Result of examination			Refusal to co-operate	Not traced	Committed to Prison	Left County
	Own Dr.	* Clinics	Gon.	Syph.	Neg.				
13	—	9	3	2	4	1	1	1	1

*—all visited by Moral Welfare Workers.

' Double ' Notification Cases.

No. of cases	Disposal			Result of examination		
	Attended clinics voluntarily.	Attended compulsorily on order	Disappeared entirely	Gon.	Syph.	Neg.
7	2	3	2	1	2	2

In all 22 notifications were received in respect of these seven ' Double ' Notification cases, viz. two cases were each notified twice, four notified three times each, while no fewer than six notifications were recorded in respect of the other case. All cases were visited by the Moral Welfare Workers but where persuasion to attend Clinics failed by this method orders were served upon the women named in three instances.

General Practitioner Service.

During the year 11 cases of syphilis (7 male and 4 female) and 8 cases of gonorrhoea (7 male and 1 female) were treated by three General Practitioners under the Scheme; in addition 10 cases of non-venereal diseases (6 male and 4 female) were also dealt with. The Practitioners concerned have been specially approved by the Ministry of Health to treat cases of venereal diseases provided the diagnosis is made at a recognised Clinic. The service was designed to obviate long journeys by patients to the Clinics for treatment, particularly where the treatment was extensive and likely to spread over long periods.

Almoners.

The services of Almoners provided by the Moral Welfare Councils of the Diocese of Portsmouth and Guildford and by the Almoner of the Royal Hants County Hospital, Winchester, are much appreciated ; this arrangement has been in existence for several years. Where transport arrangements are awkward the Almoners convey patients to the Clinic and this ensures continuity of treatment.

A summary of patients seen and helped and of visits and enquiries is given below :—

						<i>Patients seen</i>	<i>Visits and enquiries.</i>
Aldershot Clinic	...	...	...	...	...	23	35
Portsmouth Clinic	...	...	...	...	...	54	86
Winchester Clinic	...	...	...	...	...	26	102

COUNTY LABORATORIES.

The Medical Research Council Laboratories took over the work in connection with the routine bacteriological examinations for Diphtheria, Tuberculosis, Typhoid etc. on the 1st May, 1947 with consequent reduction in the staff of the County Laboratory. During the year, however, specimens examined in the County Laboratory were as follows :—

		1947	1946
Material for chemical analysis	specimens	11,473	13,117
„ „ bacteriological examination	„	14,558	23,042
Total	„	26,031	36,159

Dr. Hart has compiled the following account of the origin and growth of the County Laboratory, whose work will come to an end in the near future.

Hampshire was one of the pioneer Counties in the establishing of a Laboratory as part of its Public Health Department. In the changes of the National Health Services, this work will be transferred from the County Council, and it will be of interest to many to have the history of the County Laboratory.

In April, 1909 Dr. R. A. Lyster, the County Medical Officer made a report to the General Purposes Committee of the County Council. (The Public Health Committee did not then exist), explaining how bacteriological examinations could help in checking infectious disease, describing the phenomenon of a “ carriers ” of Diphtheria and stating the usefulness of bacteriology in controlling infection in school children. When this report was presented to the County Council in May, 1909, the matter was deferred ; but at its next meeting in August the Council ordered “ that the County Treasurer pay from time to time such sums that the County Medical Officer shall certify to have been expended during the year ending 31st March, 1910 upon bacteriological examinations in connection with the work of his Department ; provided the aggregate expenditure shall not exceed £100.” Accordingly an arrangement was made with the Pathological Laboratory of the University of Birmingham that specimens from schools up to a number of 500 should be examined for the sum of £75. At the end of the year the facilities had been used to have examined 551 swabs for Diphtheria and the total expenditure including postages was £83. 4. The grant was renewed for another year 1910—11.

The Public Health Committee was constituted in 1910 and at its second meeting in October the County Medical Officer reported on the need for bacteriological examinations of sputa in the diagnosis of tuberculosis, and of material for the detection of typhoid infections, and of the examinations of milk, water and sewage in the County ; and recommended a County Laboratory as the best means of securing these services. Also in 1911 an order of the L.G.B. required the County Medical Officer to report annually on the water supplies in all the districts in the County area. Accordingly a special Committee was appointed. Its report dealt in the main with the financial aspects of the question and showed that the County Laboratory would be likely to deal with specimens at lower rates than those paid when the work was sent elsewhere. The Finance Committee commented that they were “ always loth to recommend the County Council to open a new branch of expenditure ; but it did not appear that the cost to the County Council would be increased, and a considerable saving would result to the District Councils.”

So in November, 1911 the Council ordered that a Bacteriological Laboratory be established at the Office in Castle Avenue under the charge of the County Medical Officer, and that a Laboratory Assistant be appointed. The estimate was £250 for fitting and apparatus, with £300 as annual expenditure.

A Laboratory of two rooms was fitted up, the cost being £20 above the original estimate because of the late inclusion of apparatus for the analysis of samples of tar used for road surfaces by the County Surveyor.

The Laboratory opened for the receipt of specimens on April 9th, 1912. Mr. G. E. Slim, B.Sc., A.I.C., was appointed to carry out all the technical work, and he did this single-handed for twelve months, when he was given the assistance of a boy paid 6/- a week to do the washing of apparatus, cleaning, packing etc. One of the two rooms, was for bacteriology and the other for chemistry. The examination of diphtheria swabs for some time supplied most of the work in bacteriology. In the chemical room, analyses of water were at first the main work. The provision and supervision of Water Supplies was the duty of the various Urban and Rural districts of the County ; and the new County Laboratory undertook the analysis of samples of water for these districts at a charge of 10/- for chemical analysis and £1 for combined chemical and bacteriological investigations.

A record of the number of tests done during the first quarter of the Laboratory's existence is recorded.

	Total	Bacteriological		Chemical	
		Negative	Positive		
Swabs for Diphtheria ...	250	210	40	Water	33
Sputum for tubercle bacilli ...	36	27	9	Tar	82
Material for Typhoid ...	3	2	1	Oil	2
Cerebro-Spinal Fluid ...	1	—	1	Paint	2
Water ...	2	—	—	Urine	1
Milk ...	2	—	—		

The work done in the Laboratory during the years 1913 and 1914 is given in the County Medical Officer's annual report for these years and is as follows :—

Specimens for Bacteriological Examination	Year ended 31.12.1914.				Specimens for Chemical Analysis	1914	1913
	Negative	Positive	1914	1913			
Tuberculosis (sputum)	496	221	717	657	Water Samples ...	130	110
Liphtheria (Swabs) ...	4250	1145	5395	3025	Water for Zinc ...	11	—
Enteric Fever (Blood)	46	31	77	75	Tar	26	31
Cerebro-Spinal Fluid	2	1	3	2	Lime	10	4
Milk for Tuberculosis	13	2	15	23	Cement	18	9
Milk and other materials for T.B. ...	4	—	4	2	Milk for Fat ...	20	1
Milk for Diphtheria or other bacteria ...	—	—	6	27	Material for Poisons	1	3
Urine	—	—	6	12	Various	9	22
Water samples ...	—	—	67	74			
Hairs for Ringworm	62	104	166	19			
Blood, pus, and various	—	—	13	6			
Totals ...	—	—	6469	3922	Totals ...	225	182

In addition to tests carried out for sections of the Public Health Department and for the County Surveyor, the Laboratory was receiving specimens from all the Urban and Rural Districts with the exception of Aldershot where the Medical Officer of Health, Dr. Routley did his own laboratory work and the Winchester Rural District where a large amount of bacteriological work was done by the part-time Medical Officer of Health, Dr. A. E. Roberts.

During the first world war, the R.A.M.C. of the Southern Command sent their specimens to the County Laboratory for nearly two years, until they set up a Laboratory of their own. Later during the war, when the Americans appeared as combatants, one of the two rooms was lent to them for about six months.

The meningitis epidemic of 1915 made very heavy demands on the Laboratory which still had only the one technical worker. A large number of specimens for the detection of typhoid were received from the R.A.M.C. and in other ways the war made this period an exceedingly busy one.

The work was growing so rapidly that in 1915 a second technician was appointed ; Mr. H. J. Lawrence who had trained in bacteriology at the Lister Institute and Sheffield University. Both Mr. Slim and Mr. Lawrence continued to give their services to the Laboratory until the former retired in 1947 while the latter is carrying on.

In 1916 the L.G.B. issued regulations which required Counties to undertake the Treatment and Prevention of Venereal Diseases : one of these regulations required the Authority to provide Laboratory facilities to aid diagnosis and treatment, so that any Doctor could obtain an expert report on materials sent for examination in this connection. The Laboratory facilities were accordingly extended and in 1917 the Home Office approved, after inspection, of the registration of the County Laboratory for the purpose of the special experiments connected with Venereal Diseases. The part-time services of one of the Assistant County Medical Officers who had had post-graduate training in Laboratory work was added to the Laboratory Staff as Pathologist to carry out the Wassermann tests of Blood and microscopical and other examinations ; also to give a medical opinion on general laboratory testing which require such opinion.

Dr. Galbraith and Dr. Wilkes did this for 2—3 years when Dr. Hart undertook direction of the Laboratory and continued until its work was taken over by the National Public Health Laboratories and the Regional Hospital Board. The Hampshire County Laboratory was the only one in the area that undertook these Serological Tests for Blood and Cerebro-spinal Fluids and at the same time was approved by the Home Office for work under the Venereal Diseases Scheme ; and it dealt not only with speci-

mens from the Special Clinics and Doctors of the Administrative County, but also from the County Borough of Bournemouth and from the County of Dorset until that Authority set up its own Laboratory in Dorchester some twelve years later.

Many General Practitioners in the County wanted Autogenous Vaccine i.e. those prepared for material for individual patients for the treatment of those patients : and as result of this demand the Laboratory arranged to make such vaccines for a fee of two guineas for any Doctor and to supply such vaccine for an Insured Patient for a reduced fee of one guinea : the Hants Insurance Committee being responsible for the fee. This was a facility much appreciated throughout the County at a time when vaccines were in greater vogue than to-day.

The years work for 1916 and 1917 are recorded as follows :—

Specimens-Bacteriological	1916	1917	Specimens-Chemical	1916	1917
Swabs for Diphtheria	2134	2917	Water	77	57
Sputum for Tuberculosis	1783	1672	Spirits and Beer	3	—
Enteric Fever (Blood for Widal)	82	91	Tar	29	25
Cerebro-Spinal Fluids	252	483	Urine	3	4
Other Cerebro-Spinal Fluids for Menin- gococci	17	34	Cement	4	—
Materials for Organisms	24	155	Milk	38	10
Urine for Typhoid Bacilli	272	83	Sewage	—	12
Faeces for Typhoid	409	96	Horse Dip	—	17
Urine for T.B. etc.	23	5	Incinerator Ash	—	4
Milk for T.B.	7	5	Materials for Poisons	7	4
Hairs for Ringworm	394	308	Food Stuffs	97	22
Dysentery investigation	14	20			
Vaccines	16	55			
Malignant Growths, histolgy Various	11	—			
Various	39	55			
Shaving Brushes for Anthrax	1	32			
Totals ...	5478	6011	Totals ...	258	155

The 1916 figures reflect an outbreak of Typhoid Fever and the 1916—17 show the height of the epidemic of Cerebro-spinal Fever of the war period. The total number of examinations was rather less than those in 1914 ; but they represented more work because of the smaller proportion of swabs for the detection of diphtheria bacilli (whose examination in large numbers could be comparatively quickly carried out) and the higher proportion of tests requiring a more elaborate technique.

The laboratory was now well established and the history during the quarter of a century was one of steady expansion both of the variety of tests done and the numbers of examinations carried out. In 1925—1926 the yearly records were :—

Bacteriological Examinations					Chemical Analyses		
Specimens	Total 1925	Total 1926	Year ended 31.12.26		Specimens	Year ended 31.12.25	Year ended 31.12.26
			Negative tive	Posi- tive			
Diphtheria (Swabs)... ..	4033	5650	5266	384	Water Samples	339	374
Tuberculosis (Sputa)	1219	1563	1156	407	Tar for Surveyor	12	15
Typhoid (Blood)	160	334	305	29	Urine	45	8
For Wassermann Reactions	934	992	632	360	Milk	31	67
Smears for Gonococci	248	290	210	80	Sewage for District Councils	36	23
Smears for Spirochaetes	3	4	4	—	Other material	93	52
Cerebro-Spinal Fluid (cell counts)	30	21	—	—			
Milks for Tuberculosis	99	150	146	4			
Hairs for Ringworm	610	650	305	345			
Vaccines	45	80	—	—			
Pathological and other speci- mens	217	391	—	—			
Urine	117	235	—	—			
Water Samples	175	211	—	—			
Total ...	7910	10571	8024	1609	Total ...	556	539

The estimated cost of the Laboratory in 1927 was £1,342; and this sum was distributed to the chief medical services for which work was being done at rates per specimen which would approximately cover the outlay.

Analysis of Milk and Water Vaccines ...	£368
Tuberculosis Scheme	£263
Venereal Disease Scheme	£320
Schools Account	£538
	<hr/>
	£1,489

The "rates" for examination of sputum, throat swabs etc. were lower than the Authority would have paid had the work been sent to an outside Laboratory; and a large number of other tests were done for which no account was taken. Thus the Laboratory was both directly and indirectly an earning unit of the Public Health Department. The services for which charges were made and the scale of these are as follows:—

WATER —Chemical Analysis... ..	10s. 6d. per sample
Bacteriological Examination	10s. 6d. per sample
Complete Examination	17s. 6d. per sample
SEWAGE —Chemical Analysis	7s. 6d. per sample
TAR —Chemical Analysis	£1 1s. 0d' per sample
MILK —Chemical Analysis	2s. 0d. for the first sample and 1s. 0d. for each sample after the first sent in at the same time
MILK —Estimation of Butter Fat	1s. 6d. for the first sample and 1s. 0d. for each sample after the first sent in at the same time
MILK —Bacteriological Count	5s. 0d.
MILK —Examination for Tubercle Bacilli	(a) Microscopical 2s. 6d. (b) Biological 10s. 6d.
AUTOGENOUS VACCINES —Simple	£1 1s. 0d.
Compound	£2 2s. 0d.
Special rate for insured persons	£1 1s. 0d.
WASSERMANN REACTION, SMEARS FOR GONOCOCCI OR FOR SPIROCHAETES	Ministry of Health scale.

Most of this work was done for public authorities; e.g. water analyses for District Councils. Tar for Road Surveyors; Vaccines for Hampshire Insurance Committee; but private persons could have any samples tested at the same charges.

In 1927, the larger number of Blood Specimens sent in for Widal Test (628) indicates some activity of Enteric Fever in that year. Pathological work had also increased as is seen by comparison of 1916–17 figures.

In 1928–29, there were some outbreaks of Diphtheria in school children; and in order to detect carriers and early cases, extensive examinations of throat swabs were carried out. In 1929—10,861 were sent by the School Medical Service and 4,795 by private doctors and Hospitals. The Bacteriological Laboratory's annual figures were.

1927	11,730	Specimens
1928	16,915	„
1929	22,286	„
More normal figures of growth as the Diphtheria subsided:—		
1930	13,886	„
1931	14,683	„

Additions to the work now came from examinations of milk under the Milk and Dairies Act and Order; also from Biological Tests of Milk for the presence of Tubercle Bacilli. This involved inoculation of guinea pigs and the Licence for such tests was granted by the Home Office, and this branch of the work was subject to Government inspection.

With the expansion of the Maternity Services, the County Laboratory was ready to carry out the Haematology, Biochemistry and Bacteriology required during pregnancy and the puerperium. The importance of anaemia during the ante-natal period had growing recognition, and blood counts increased steadily, and are now being received by the Laboratory at the rate of 1,200 a year; the majority come from County Clinics, the rest from Medical Practitioners from their patients. No fee is charged for these examinations.

In 1938 the Ministry of Health invited Pathologists in charge of Laboratories approved for the Venereal Diseases Scheme to undertake a comparison of Wasserman Tests in collaboration with Dr. Richardson the pathologist of the Ministry's Laboratory in London. The reason for this was the frequency with which varying results were obtained by different Laboratories who examined the Blood Serum of the same individuals. A digression on this may interest many readers.

The Wassermann Test is a sensitive test which is easily affected by apparently insignificant factors ; it has not the arithmetical accuracy of a chemical test, nor of most biochemical reactions. Only two ingredients approach an absolute standard, viz. physiological Saline and a solution of cholesterin. The others are such variable things as red blood cells from a sheep which are repeatedly washed in Saline and then packed as tightly as possible by spinning in a centrifugal machine ; a minute amount of serum of a rabbit which has become highly resistant to sheep's red cells by reason of previous inoculations ; an extract in alcohol of heart muscle ; fresh blood serum from a guinea pig, and some serum from the blood of the person to be tested.

The ingredients are added in prescribed order at ordained intervals, the mixture kept for measured periods at specified temperatures in an incubator. The results are read as either negative, or positive of various degrees, weak, ordinary, or strong.

Much research in many countries had been done to find a technique which would give a constant result ; and various modifications in the manner of making the test developed from time to time. Disagreements, occasionally serious, had been found when the same blood specimens had been tested by different pathologists of repute.

The Hampshire County Laboratory agreed to the proposed comparison and 200 Sera were tested by the two Laboratories in batches of 20 : neither pathologist being given information as to the source of the blood serum. The result of this Comparison of Wassermann Tests was :—

Blood Tested	Results of Wassermann Reactions							
	Dr. Hart's Tests				Dr. Richardson's Tests			
	Strong Pos. (++)	Pos. (+)	Weak and doubtful (+)	Negative (-)	Strong Pos. (++)	Pos. (+)	Weak and doubtful (+)	Negative(-)
4 Sera from known cases of Syphilis (untreated) ...	4	—	—	—	4	—	—	—
71 Sera from known cases of Syphilis in various stages of treatment ...	9	6	13	43	13	4	20	34
1 Serum from a case with a history of Syphilis ...	—	—	1	—	—	—	—	1
124 Sera from cases believed to be Non-Syphilitic ...	—	—	8	116	—	—	3	121

Those who have knowledge of the test will appreciate the agreement in findings was eminently satisfactory.

In 1934 the Laboratory took on the estimation of butter fat in milk for the Hampshire Milk Recording Society, and so added about 13,000 a year to its output of tests done. It continued to carry out the same work for the Milk Marketing Board when this came into being.

The Annual figures for 1935 and 1936 show how the Service had developed]:—

Specimens	1935	1936
Diphtheria (Swabs) Schools and Other	6080	7887
Tuberculosis (Sputa)	2360	2765
Typhoid, Blood for	181	312
Wassermann Reaction (Blood)	2691	2985
„ „ (C.S.F.)	212	191
Smears for Gonococci + Spirochaetes	397	475
Cerebro-Spinal Fluid	23	28
„ „ (Cell counts)	24	19
Milk for Tuberculosis (Microscopical)	464	723
„ „ (Biological Tests)	2148	2321
Ringworm, Schools and Other	301	91
Vaccines	101	81
Pathological and other specimens	758	879
Urine	655	746
Water Samples for bacteriology (for County Architect, Surveyor, Schools, C.M.O. and Others)	425	367
Totals	16820	19870

Chemical Analyses, etc.

Specimens	1935	1936
Waters for Chemical Analyses (for County Architect, Surveyor, Schools, C.M.O. and Others)	411	367
Milk (Accredited)	1886	5192
Milk for Phosphatase Test	18	130
Milk for Butter Fats	3570*	13546
Sewage for District Councils	32	34
Other Material	294	742
Total	6211	20011

* This number represents tests made for the last quarter only of 1935.

The figures reflect the activities of the Tuberculosis Service in ascertainment and control of that disease (Sputum Tests over 2,500); the increasing routine testing of Blood (Wassermann Tests 3,000); the campaign to get purer milk and eliminate Tuberculosis from cattle (Biological Tests of milk for Tuberculosis over 2,000).

The Chemical Section of the Laboratory had enlarged its scope in testing of milk for quality and grading, as farmers who were authorised to sell Grade A or Tuberculin Tested qualities were required to have periodic examinations of their milk. The number of tests from the whole Laboratory now touched 40,000 a year.

So far all the Laboratory examinations that were being carried out were in connection with one or other of the Public Health Measurers for which the County Council or District Council were responsible. Frequently specimens were sent to the Laboratory or requests made by doctors for tests to help in diagnosis or treatment of their own patients. As the volume of this grew, it was decided to prepare a list of examinations of a type which the Laboratory could conveniently perform without impairing its Public Health functions, and which would help the general medical service of the area. All Practitioners in the County were informed of the details, and a moderate fee was charged for each test. The provision of these facilities involved an extension of the general clinical pathological work, and each year saw an increase in its usefulness.

During the 1939-1945 war the modern blocks of the Institution at St. Paul's Hill, Winchester, were taken over by the Ministry of Health, and a Hospital under the Emergency Medical Service was set up. The bulk of the general pathology of the Hospital was undertaken by the County Laboratory in July, 1942, and there was enough of this to make a big increase in the scope and amount of this work in Clinical Pathology to demand additional staff. The extent of this War addition may be assessed by the fees for tests performed, which in 1944 were £544; and the responsibility for the work lasted 2½ years, until the Hospital closed down.

At this period the activities reached the highest level; Dr. W. J. Hart continued to give general direction as Pathologist; and the staff was three senior technicians, three junior technicians, and two other workers.

A general description of the variety of services was given in a report to the Public Health Committee in 1947, in which the main items were classified according to the Authority or District for which they were carried out.

- A. *For Hampshire County Council Tuberculosis Scheme*
Sputa 5417. Pleural fluids, cerebro spinal fluids, pus, and other material
- B. *Serological and Microscopical Examinations*
Wassermann Blood Tests 10,170, Kahn Tests 722, G.C.D.T. Tests 740, Smears 1137
For (1) Hampshire County Council V.D. Scheme
(2) Bournemouth Corporation V.D. Scheme
(3) Blood Testing for Ante-Natal Work
(4) Testing Blood donors in connection with National Transfusion Scheme
- C. *For Hampshire County Council Public Health Services and other Departmental Services*

Examinations of Diphtheria swabs 2839, of material for the detection of Typhoid, Meningitis and other infectious diseases. Ante-Natal blood counts 826. Urine, swabs, other blood examinations in Maternity work; water analysis for schools 67. School milks 103. Various examinations for School Inspections and Clinics.

- D. *For Ministry of Agriculture*
Milk, biological reductase test, phosphatase tests, 7,100
- E. *For Various Hampshire Sanitary Authorities*

Water analysis, chemical 396, bacteriological 878, sewage 52. Routine examination of pasteurised milk 1,074.

- F. *For Isle of Wight*
Milk 185
- G. *For Private Practitioners*

For some years the laboratory has carried out certain examinations for Private Practitioners at charges approved by the Council. It has been of great use in many cases when the patient could not afford the fees of a consultant pathologist and when reference to an Out-Patient Department was inconvenient. Blood Counts 750, various chemical examinations 161, other microscopical and bacteriological examinations 300.

Similar work has been done for small hospitals possessing no pathological laboratory; sometimes for Knowle Mental Hospital; no charges have been made. No charges have been made for tests done at request of Army, Navy and Air Force Medical Officers, nor for the County Police.

Financial Considerations.

The value of the work done in the laboratory has never been assessed according to standards of charges. The total cost of the Service has been allocated to different Departments; and the charges thus made have been very much below those usually recognised, which would have to be paid were the work sent to an outside Laboratory. In October, 1943, the Ministry of Health issued a circular 2861 as the charges to be paid for pathological examination. It was based on a unit system, i.e. each examination was given a number and the charge was to be this number multiplied by the unit cost. The present charge per unit is 1/6 and this is the charge that would be paid if work were sent by the Council to a Hospital Laboratory.

The value of the work of the laboratory service during 1946 is here assessed on the larger items only, and on the above-mentioned scale of charges. It is thus an underestimate.

(a) Value of work done for Hampshire County Council Public Health and other services.

Water Analysis	£58
Blood Counts (Ante-Natal)	£186
Milks from Schools	£35
Milks, General Service	£215
Diphtheria Swabs	£638
Examinations of Sputa	£1214
Wassermann Tests (general service of V.D. Scheme)	£400
(for Ante-natal work)	£345
Other serological tests	£85
Microscopical examinations (V.D. Scheme)	£165
Miscellaneous Swabs, etc.	£300
<i>Total of items (a)</i>	<i>£3,641</i>

(b) *Monies received by the laboratory*

From the Ministry of Agriculture	£683
From the Sanitary Authorities	£725
From the Isle of Wight	£46
From private medical practitioners	£387
From Bournemouth Corporation (V.D. Scheme)	£580
<i>Total of items (b)</i>	<i>£2,421</i>

Combined Total £6,062

The estimated cost of the laboratory for the year 1946 was £3,670 and as above £2,421 was received from outside Authorities as shewn in (b) above. This means that for £1,250 the whole of the services in section (a) were enjoyed by the County Council. This advantageous position is chiefly due to the large number of samples in certain particular tests.

During the War. Emergency Laboratories were set up by the Ministry of Health at different centres in England, and one such was opened in Winchester, housed in part of the College buildings. The Laboratory's interests were Prevention of Epidemics and Infectious Diseases. The Ministry of Health planned to continue and enlarge these laboratories for Bacteriology and Epidemiology so as to create a National Public Health Laboratory Service as a permanent institution, and a new building was erected in the grounds of the Royal Hampshire County Hospital as part of this free National Laboratory Service.

Accordingly, on May 1st, 1947, all the bacteriology done heretofore in the County Laboratory was transferred to the new Public Health Laboratory, of which Dr. Mackenzie is the Director. It comprised Section A, C (part), E (part), and F. There was left approximately half the work still to be done, so the staff was reduced to two skilled technicians and two assistants. Another block of work became the responsibility of the Regional Hospital Board on July 5th, 1948, but the County Council has been asked to carry on until such time as staff and accommodation permit the taking over of the Clinical Pathology, Biochemistry, Serological, and other Tests.

VOLUNTARY ASSOCIATIONS.

The work of the Voluntary Associations continues and I endorse the comments made in my report for 1946. "The County Council is indebted to a considerable extent to the various Voluntary Associations who carry out so much splendid work for the well-being of the people in this County."

H. LESLIE CRONK,

County Medical Officer.

November 1948.

